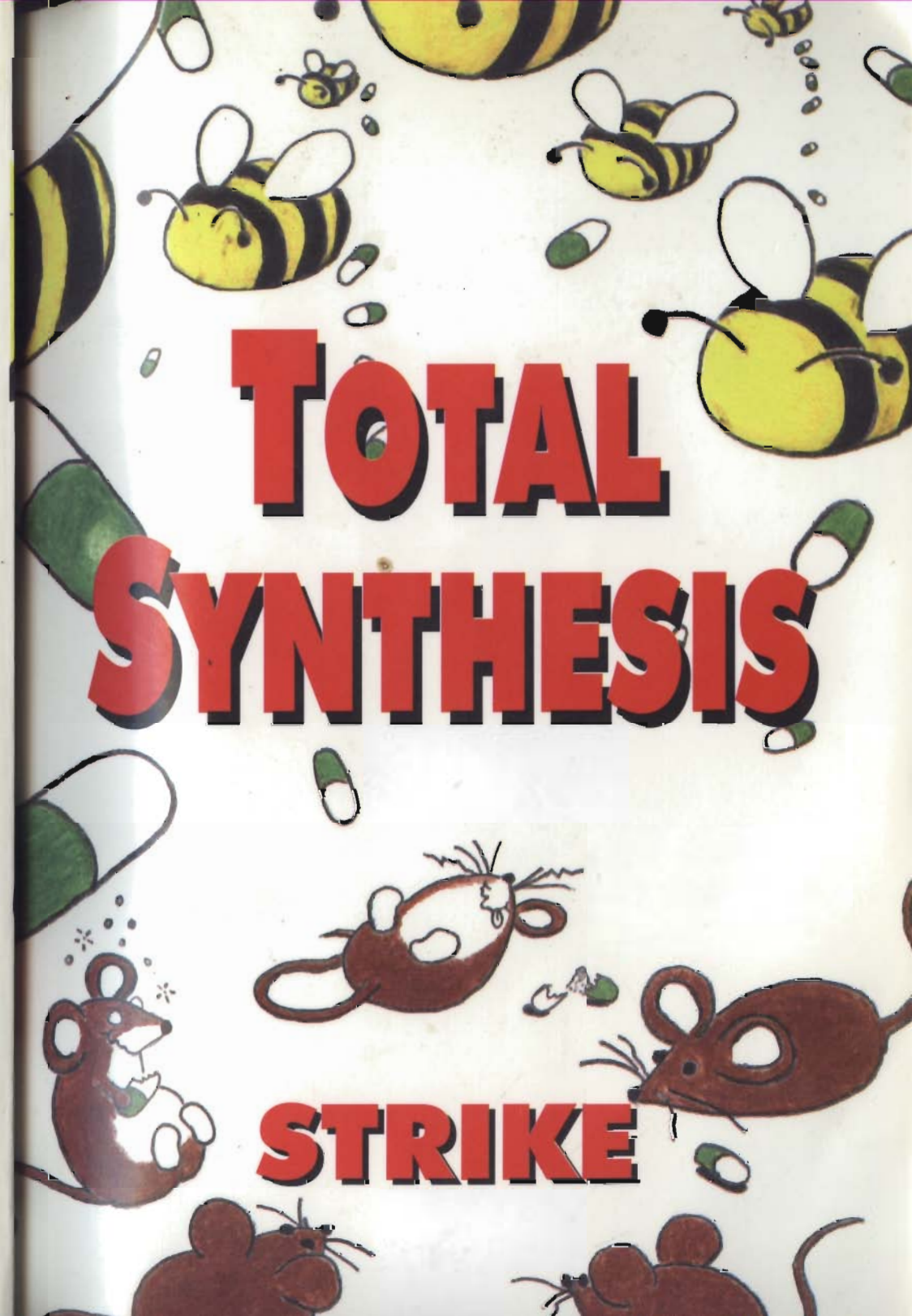


**The War is Over.**

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# INTRODUCTION

You have just purchased or stolen the most complete book ever written on the underground production of ecstasy and amphetamines. No detail has been spared on how things are made, purchased and used by the completely clueless to the most competent chemist. The recipes in this book are the most basic and direct means by which ecstasy and methamphetamine can be produced. Some recipes are older, more well-known procedures that Strike has explained in greater detail and/or has added some new twists to make them even better. Many recipes are new applications that have never before been published as ways to produce ecstasy and amphetamines.

Rather than waiting around for all these recipes to meet an eventual blockade by governmental powers, Strike has included an expansive section on how the molecules and precursors used by today's chemists can be easily made from basic, unwatched chemicals. If applied, these ground-up synthesis paths could render the war on amphetamine drugs futile.

This book is not a bunch of reprints of hopelessly complex journal articles or obscure procedures that are useless to an unequipped or unskilled chemist. Every procedure herein is perfectly suited for novice little rave rats and includes tons of detail with extensive drawings of equipment, set-ups and chemical structures. Plus, Strike has included as many references as possible so that you, dear readers, can ultimately decide if what Strike is saying is bullshit or not.

So enjoy the book. Don't try anything in it, just read it. With the retroactive strategies shown here you will know why the book is titled what it is.

# **BASIC TRAINING**



## Ecstasy and Amphetamines

Ecstasy is the most benign drug Strike has ever encountered. It is passive yet powerful. By powerful Strike does not mean that it incapacitates or makes one dangerous. It is, in fact, quite the opposite. Its power is in its ability to evoke a total sensory bath of tactile, visual and mental enhancement. One's perception is perfectly clear. Hallucinations are nonexistent. The feeling one has is, literally, ecstasy. Plus, it is one of the few narcotics in the world that is not physically addictive. Why this substance was taken away from the people is a question that only government-funded scientists can answer.

Here is what Strike has to say about speed: "yawn!". But, hey! The speed recipes in here are treated with the same seriousness and detail as the X recipes.

The ecstasy molecule itself is just an amphetamine with a couple of extra things attached to it. The chemical structures of the major ecstasy class drugs, speed class drugs and both of their respective major precursors can be seen on the following page.

MDA and its brother, amphetamine, are the easiest to make, involve the least watched chemicals and are the strongest. MDMA and speed, although less strong and shorter lasting, are perceived by many as 'better' because the highs they produce are smoother and more pleasant. This is not necessarily true as the degrees of differences between MDA and MDMA or amphetamine and speed are very subjective. They are equally fine in their effect except that MDA is better. The sooner the chemist accepts this, the easier her journey through underground synthesis will be in many respects. So, when Strike uses the blanket term of 'ecstasy' or 'X' throughout this book Strike may be referring to either MDA or MDMA (mostly MDA). Strike will let you know when a specific difference is required. Anyway, if one were to look at that nitrogen atom stuck on the MDA or amphetamine core one can see that as more carbon groups are added on, the weaker the drug becomes. So MDEA and PEA are even weaker than MDMA and speed, but they do retain some pretty fair activity.

Precursors are molecules that are just one or two steps away from being the final drug. MD-P2P and P2P are about as close as one could get to the final product. That is why these two chemicals are arguably the most

restricted chemicals known aside of the actual drugs themselves. Chemists these days waste no time trying to figure out where or how they can get MD-P2P or P2P because it would be next to impossible to do so. Therefore, MD-P2P, P2P and other precursors have to be made from similar molecules. This where the X makers luck out. Nature provides a ready-made precursor for X production in the form of a natural plant product called safrole (see safrole chapter for all the scoop). Isosafrole and piperonal can also be made from safrole and all three are very close to becoming X. Alas, there are no naturally occurring precursors for the poor speed maker except for benzaldehyde. But that's okay because this book is going to show tons of different ways that an underground chemist can make any precursor she wants.

Regardless what precursor is used or what procedure is employed to turn that precursor into final product, this one, basic premise stands: any method that can be used to make X will work as well, if not better, on the conversion to speed. That is why this book is as thorough a course on speed production as it is for X. Only modesty prevented Strike from saying so on the cover.

not subject to the same policies that the companies they sell for employ. This is not meant as a putdown but these distributors are like car salesmen. The only way they make money is through the commission on sales. This means that they tend not to care about whom they sell these other companies' products to. They just want to sell stuff. A chemist calls one of these companies and orders something simple like a thermometer or water and then pays for it promptly. Having then established an account (a foot in the door) the chemist will have gained that company's trust in knowing that she (the chemist) is a good customer. Then, next time, a little catalyst, ether or, perhaps, a distillation kit can be ordered. Having already established that the chemist is a good customer they tend not to ask for the required permit to buy glassware or as to the purpose that some chemical is needed for. And so the charade goes on.

These types of businesses are the prime choice a chemist will use to get that specialty chemical or piece of glassware. There are thousands of such places around the nation, Canada and Mexico.

### *(3) National distributors*

If a chemist were to go down to her local university or graduate research school she could find science company catalogues in the library and in the divisional labs and offices of the research center. Representatives of every conceivable scienceware company and manufacturer like to drop off tons of their catalogues in the hope that someone will order some of their products. If the library has none, then the chemist goes up to one of the labs and asks someone if she could take a look at some of their catalogues. This is not a problem because the labs are full of graduate students who are dying for attention. Some have so many catalogues they don't use that, if asked, they would probably give the chemist some.

What the chemist is looking for are product companies that sell everything but glassware and chemicals. The reason for this is that if they know they don't sell anything that is watched then they have no reason to care who buys their stuff. In fact, they want to sell the chemist stuff very badly. The other types of catalogues to look for are those that accept credit cards and money orders as payment. These companies obviously sell to individuals. All of these companies are excellent places to stock up on everything the chemist needs, especially low priced magnetic stirplates, vacuum pumps, plasticware (great alternatives to some glassware), electronic scales

companies that will deliver science products to a P.O. box]  
Rep: "O.K. Mr. **Fake Name**, what can we do for you today?"

Now the chemist rattles off the catalogue numbers of the things she wants and the quantity of each. After the order is confirmed the chemist asks that the entire order be shipped by overnight express and has this added to the total bill. The chemist then asks for the purchase order number of the purchase she just made so that she can include this on the payment she's going to send. The chemist uses a reputable money order and sends this money order to the company via priority overnight mail. All this rushing accomplishes two things: it shows that the chemist's company is a professional, goal-oriented company, and it also gives no one any time to second guess a thing or establish a stakeout of the delivery site.

At times it may seem that Strike is implying that buying from these companies is a cat-and-mouse affair that leaves suspicions high and traces put on one's phone line. This cannot be further from the truth. These companies want to sell their products. If they had to file notice to the DEA or demand documentation every time someone called then they would be broke in a week. This does not mean that a chemist should be careless. It's just that if a chemist is polite, friendly and smart then almost anything can be had. And since, as this book will point out, most everything the chemist needs will be unwatched, there will not be a great deal of suspicion no matter what the chemist orders. Just remember one thing: the chemist never orders anything to the same place she cooks at.

Science dealerships aren't the only places to get the stuff one needs. At those mega hardware stores one can find pure acetone, methanol, ethanol, toluene, methyl ethyl ketone, DCM (as a constituent of some stripping agents), sodium hydroxide in the form of lye, and some acids such as sulfuric and hydrochloric. These precious tools can be bought there cheaply and in great quantity.

Then there are other places such as chemical waste exchanges, pool supply companies, electroplating companies, photography supply shops, agriculture companies, specialty gas canister companies and just about any place where a chemical can be sold.

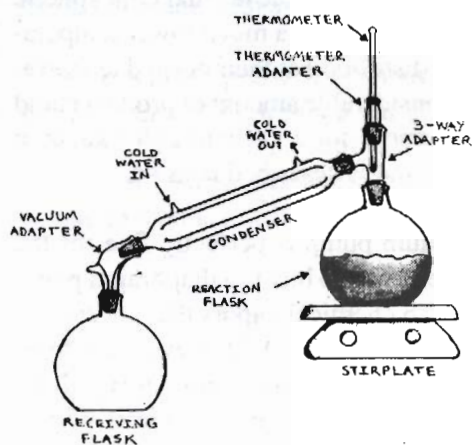
Finally, if one simply cannot find the thing one needs then it's time to hit the bibles of industrial and commercial sources: "Chemical Buyers



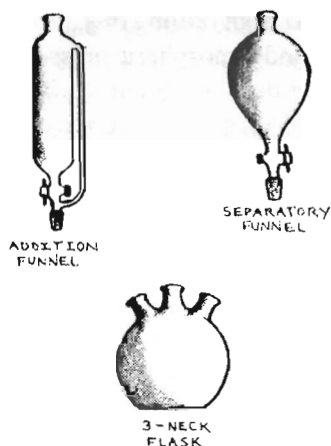
# What To Buy

## GLASSWARE

Ideally, the chemist wants a distillation kit with joints that are of the size 24/40(don't ask). This is the most versatile joint size for accommodating both large and small flasks. Speaking of flasks, the type one wants these days are flat bottomed flasks, not round bottomed flasks. Flat bottomed flasks allow one to heat on flat surfaces such as a heating stir plate. In the first of many beautiful, hand drawn sketches that will appear throughout this fine book one can see the components and proper configuration of a regular distillation set up in figure 1. Other pieces of glassware that are highly desirable but can be lived without or made (as shown later) are shown in figure 2.



[fig 1]



[fig 2]

Now, one is going to see most of the older chemical recipes calling for all reactions, solvents, acids and bases to be held in Pyrex(borosilicate) type glassware because anything else will melt or degrade when exposed to all these harsh chemicals and conditions. This is no longer true! Any reaction, addition or mixing in this book that does not require direct heating can be done in a polypropylene (PP) or polyethylene (PE) container. This is regardless of the chemicals involved. Polypropylene (PP) and polyethylene (PE) are very inert and chemically resistant to almost anything this book describes. Buckets, tubs, funnels, and all sorts of containers of this



find at any pet store for about \$10. All the chemist does is attach a hose to the outlet, chunks the little pump into a bucket of ice water, attaches the hose to the condenser and there it is. An alternative source is that little pump that's attached to the windshield washing fluid reservoir of any car in a junk yard. The chemist removes the reservoir (pump still attached), applies an adapted power source to the pump and uses the plastic reservoir to hold the ice water.

## **HEATING AND STIRRING**

There really is no good substitute for a combination heating and magnetic stirring plate, nor is there any reasonable excuse not to get one. These are perfectly legal to buy and can be found at any science outlet for about 200-400 dollars. Here's one area that the chemist should not skimp on. This piece is going to be the center of every action in the laboratory so a really good one with as large a surface area as possible is a definite plus.

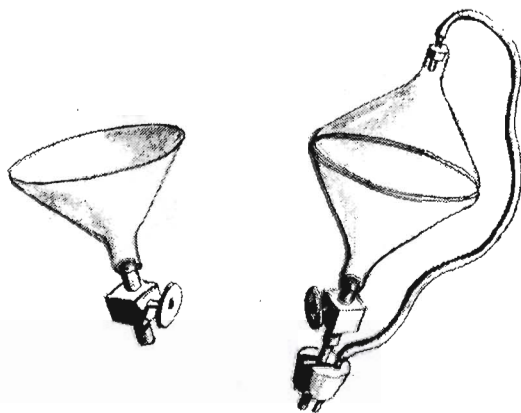
Let's just suppose, hypothetically, that the underground chemist is too stupid or unwilling to get a stir plate. In this case a single unit portable hotplate can work, but controlled heat using these is best accomplished by water or oil baths. Stirring can be accomplished by attaching a shaft and paddle to a power drill or any gear driven motor.

The best replacement for borosilicate glassware is stainless steel. Stainless steel takes the heat, won't break, and, most importantly, is about as resistant to chemical degradation as the chemist can hope to find. For those items that won't be subjected to direct heat there can be some steel/metal or steel/plastic hybrids. In figure 3 is shown how flasks of any size can be made with two stainless steel mixing bowls welded together. Also shown is the vacuum adaptor and condenser. For the condenser only the inner pipe need be steel. The outside pipe can be copper or something. As for the other components of a distillation set up, well, they are made just as they look.

In figure 4 is shown how a separatory funnel and a pressure equalized addition funnel are made. The funnel part is just a PP funnel from the grocery store and what it is attached to is a stainless steel ball valve. See how the addition funnel is made by using a rubber stopper and an extra extension of tubing to the top of the funnel? Well, that's how one can make a sealed addition funnel out of the ordinary glass separatory funnel that one gets with a distillation kit or from wherever.

All of the pieces pictured here are not going to fit perfectly into each other and that's going to cause all sorts of leaks. The answer is teflon tape. Strike loves teflon tape! This inexpensive product is found in the plumbing department of any hardware store and is the duct tape of the next century. Teflon tape is chemically and thermally indestructible. This stuff is wrapped around

any piece of pipe or joint, said part then jammed into its appropriate receptacle and the tape will mold to form a perfect fit. Hell, it can mummify a whole joint complex to make it absolutely impregnable.



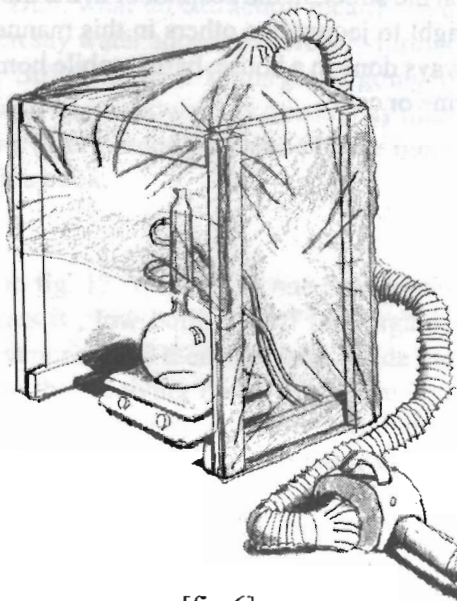
[fig 4]

So what's the downside of using a stainless steel distillation kit? The chemist can't see shit! There is a definite advantage of being able to see a

the most deadly shit imaginable can be evolved. That is why the chemist will construct the one thing that may end up saving her life: a fume hood.

In professional laboratories fume hoods are big metal boxes resting on counter tops and are connected by ducts to blower motors on the roof of the facility. The blower motor is constantly sucking the air from the hoods to the outside so that chemists will not be exposed to the vapors of chemicals they are working with inside the hood. The same precautions are taken by non-dead underground chemists.

A fume hood is constructed in the manner shown in figure 6. Strike drew the frame as being made of lumber but it can be made of rebar or, preferably, from PVC pipes and joints so that it can be assembled and disassembled with ease. The frame is enclosed with plastic drop cloths or any semiclear plastic sheeting. The front face of the hood is half way covered with plastic while the bottom half is exposed to allow one to move objects in or out and to manipulate things. On top of the chamber is attached some clothes dryer duct or some such crap which is led to a leaf blower or blower motor. The exhaust from the blower is led away to the outside.



[fig 6]

Although a leaf blower is probably way too strong it may still be adequate at its lowest setting. To insure that a correct air flow is being pulled the chemist holds a lit cigarette about a foot in front of the hood's opening and looks to see if the smoke trail is being pulled into the hood. If so, then the hood works just fine.

Many houses have outside-venting blowers over their stoves. Chemists in these situations can actually drape some plastic around their stove top to make a perfectly adequate hood. However, chemists who live in



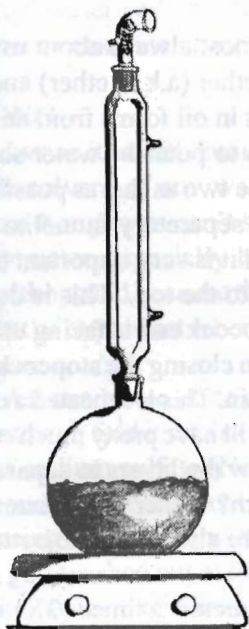
## Methodology

Strike really can't believe that Strike is including a chapter of this nature. As it so happens Strike was showing a rough draft of this fine book to a couple of people whom Strike did not consider idiots. They seemed to grasp the chemistry but had considerable trouble understanding what Strike figured was common knowledge. "Duh, what do extraction mean?" said the Boy. "Duh, what do it mean when say water added to solvent?" further said the Boy. 'Oh for Christ's sake!' Strike thought. If this guy is going to get hung up on things like this then who knows how many others may miss the meaning of a recipe. So here is a brief rundown of some of the more basic procedures employed in this fine book.

### DISTILLATION

You see that distillation setup in fig. 1? Well, when one puts something into the reaction flask and heats it, low boiling stuff like organic solvents (acetone, ether, DCM etc.) vaporize and then condense inside the condenser. They then drip down into the receiving flask. Next (usually) comes water, then finally (as far as drug chemistry is concerned) comes high boiling drug oils. Distillation is the most preferred and reliable way to purify substances from one another.

There are three basic forms of distillation: simple, vacuum and fractional distillation which can be an extension of the first two. Simple distillation is just plain old distillation with no vacuum and is used for purification of low boiling mixes or for removing solvents such as ether. For vacuum distillation a thick walled or reinforced hose is connected from a vacuum pump to the nipple (tee hee!) of the vacuum adaptor. Application of a vacuum greatly reduces the temperature of boiling and is a must for most of the distillation in this book. Fractional distillation is merely vacuum distillation except an added glassware component such as a small Vigreux column or a Claisen adaptor packed with shards of glass is placed between the reaction flask and the 3-way joint of a normal setup. Either of these additions create a gauntlet of extra surface area elements that distilling liquids must pass through in order to condense. This affords a greater degree of separation between mixes of oils that have similar boiling points. However, it has been Strike's observation that most of the bulk separation in this book using distillation can be achieved with regular old vacuum distillation.



[fig 7a]



[fig 7b]

You see that vacuum adapter stuck to the top of the condenser in fig. 7a? Well, a closer look at it in fig. 7b will show that it has some drying agent sandwiched between two cotton balls and the nipple (tee hee!) sealed with plastic wrap or foil. The drying agent can be either a commercial product called Drierite or calcium chloride. This attachment is placed on top of a condenser when refluxing solutions that have no water in them and must remain that way during the time they are refluxed. All this is to prevent moisture in the outside air from coming into contact with the cold surface of the of the inside walls of the condenser. This will surely happen and the condensed outside-air water will drip down into the reaction flask and ruin the experiment. This is not so much a concern when refluxing large aqueous solutions such as acid or base hydrolysis seen later in this book.

One side note about the drying attachment is that it need not be a vacuum adapter. Anything, such as a funnel, that can hold a plug of drying material and fit snugly into the condenser will work.



Distilled water sells for about \$1 a gallon down at the supermarket. Tap water is an absolute no-no in chemistry except for cleaning the glassware.

## DRYING

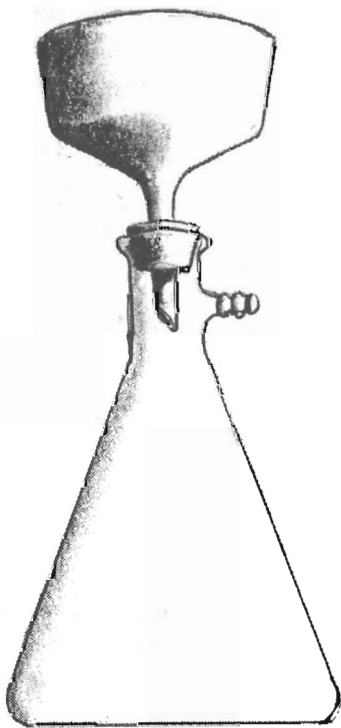
Just as it is with laundry, drying often follows washing and is used to rid the solvent of any water that it absorbed. All solvents absorb some water although you can't see it. It is a good idea to rid the solvent/product of any water, especially before distillation, because it's one less thing to worry about and because there is an off-chance that water may form a slight amount of byproduct when heated with product oil under distillation conditions.

All one has to do to dry something is to take a sheet of filter paper or paper towel, fold it into a cone and place it into a funnel. About a shot glass full of sodium sulfate ( $\text{Na}_2\text{SO}_4$ ) or magnesium sulfate is dumped into the filter and the solvent poured through it. It is also a good idea to follow up by rinsing the  $\text{Na}_2\text{SO}_4$  with a little extra, clean solvent to insure that everything gets washed out of the drying agent. The  $\text{Na}_2\text{SO}_4$  is a white crystalline salt that tastes like table salt. It binds water molecules without readily dissolving and leaves the solvent water free. This way of drying is also an option for making some solvents and pure liquids anhydrous (water free, bubba!) for some of the recipes in this book that call for such things.

Drying isn't absolutely necessary, but it is a good bet that if a recipe stresses its use then an evil underground chemist will do so.

## VACUUM FILTRATION

This procedure is used to separate crystallized product from solvent or to remove crap and solids from a liquid. Figure 8 shows the proper apparatus to use. The collecting flask is called a side arm flask and to that extended nipple (tee hee!) is attached a vacuum source. The thing that is



[ fig 8 ]

## Safrole, Isosafrole, Sassafras and Other Essential Oils

This happy little chapter is going to tell you how the evil underground chemists get all the precursors for X, meth, and other psychoactive amphetamines from natural, legal sources.

Safrole is the #1 starting material for making X today. As a pure chemical it is a schedule I controlled substance and, obviously, is illegal to own or buy without a permit. But, safrole is the major component of the essential oil of sassafras which is still quite legal to obtain. Sassafras oil has a strong licorice smell which is imparted to it from the safrole molecule. In fact, sassafras oil flavors some licorice candies and almost all commercial root beer brands! Commercially, there are two kinds of sassafras oil being sold today: American sassafras (*Sassafras albidum*) and Brazilian sassafras (*Ocotea symbarum*). Plain old American sassafras contains about 80% safrole but the Brazilian sassafras oil is almost 90-95% safrole and can pretty much be used as is.

So where does one go to get sassafras oil? Well, if one were to go down to one of those sickening hippie health food stores or incense shops there, on the shelves, will be small bottles of 80-90% ecstasy starting material labeled as sassafras oil. Larger quantities are ordered rather cheaply from fragrance or perfume supply companies that one can find in any big city yellow pages. Now the people at these companies aren't stupid. They have a general idea of what some of their essential oils can be used for so they might ask. But they still have no legal reason not to sell these things to the chemist. After all, the same stuff is being sold over the counter to hippies just down the street. Just to make everything easier for all involved the chemist informs the company of the fake name of her business and that she makes soaps, incense, potpourri or is an aromatherapist (no kidding). Other places to order essential oils would be home care products houses, toiletry base companies, soap companies, flavoring companies and organic foodstuff companies.

All of the above safrole/sassafras oil sources are the more standard avenues to get these commodities. There are some rather exotic sources of safrole for the desperate, governmentally-challenged citizens of the future. Certain kinds of Asian camphor oils, especially brown camphor oil, can contain 40-90% safrole. Sources selling 'artificial sassafras oil' are actually selling a mix of 50% camphor and 50% safrole which can of course be

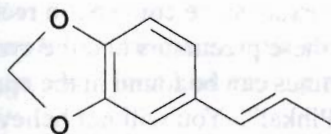
3-5% sodium hydroxide (NaOH) solution. Little white crystals of eugenol anion will form in the water layer. The water layer is poured off and saved. That eugenol is valuable. Eugenol is usually the main contaminant in safrole in more ways than one. It is the only molecule in sassafras oil that will react the same way as safrole so if it hangs around with the safrole it will compete with safrole in the conversion reactions. Also, eugenol is about the closest to safrole in both structure and boiling point so that trying to get rid of it by fractional distillation will be very tough indeed. Anyway, after the eugenol/water is poured off the oil that remains is stirred with 3 washings of clean water. After the third washing is poured away from the oil the oil is transferred to an ordinary cooking pot and boiled at 100°C for a few minutes to boil off all the water. What would you think of french fries cooked in that oil, huh?

The above procedure was a good step towards purity and may be all that one can hope for without a distillation apparatus. For those that have a distillation kit its time to get rid of the rest of the stuff by fractional distillation. This still isn't going to be easy because even with a packed Claisen adapter or Vigreux column the entire mass of oil is going to distill over with barely a 5 degree difference between the first drop of oil to come over to the last (this usually occurs at around 170-180°C under normal vacuum). The best strategy is to distill the oil at least 2 times; discarding the first few mLs (milliliters) of distillate and leaving the darker last few mLs behind in the reaction flask (discarding them as well).

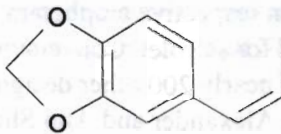
It will be a little tricky but one can also try to purify by freezing! The sassafras oil is thrown into the freezer to chill. Safrole itself freezes at -14°C so anything that starts to freeze prior to that can be cold filtered in a prechilled vacuum filtration setup. The filtrate goes back in the freezer until -14°C is reached and the mother lode of safrole freezes up. This again is filtered cold but this time the frozen mass of safrole crystals are washed with some ice cold methanol or ethanol (preferably at -14°C) to wash away the unfrozen high boiling constituents.

If one is absolutely serious about ultra pure safrole then it can be separated from the eugenol-free sassafras oil by treatment with mercuric acetate [9,10,11,12] which likes that terminal double bond that only safrole has. The  $\text{Hg}(\text{AcO})_2$  latches on to safrole at that double bond bringing it into solution as a solid; sort of like the way that eugenol was. The safrole can then be separated from its still oily buddies by vacuum filtration. Safrole is





*trans* - Isosafrole



*cis* - Isosafrole

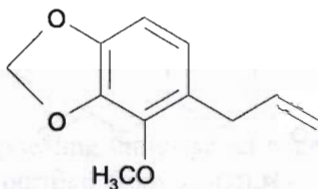
added to the residue left in the reaction flask with stirring and then the isosafrole is extracted from the water with DCM or ether or benzene. The solvent is removed from the isosafrole by distillation to give clear oil (yield is ~100% *cis-trans* isosafrole). The chemist can try to separate the two isomers by careful fractional distillation but it will be next to impossible to do because both the *cis* and the *trans* have practically the same boiling point. There are a few things that the chemist can do or hope for to get rid of that *cis* isomer. The *cis* configuration is less stable than the *trans* and may switch over to the *trans* configuration with a little help. The chemist can gently heat the isosafrole oil to about 150°C for an hour or so. She can also try the same heating except have the oil mixed with some acetic acid. Also, the isosafrole can be fractionally distilled to ultra purity and then be allowed to simply sit for a couple of days. *Trans* isosafrole may spontaneously crystallize out while the *cis* form remains as an oil. They can then be separated by filtration.

When all is said and done, the chemist may just wish to leave the damn *cis* isomer in with the *trans*. It's not really going to hurt anything and if it goes unreacted in some of the conversion steps it will be lost in the process long before X is made. It might even correct itself during some of the conversion steps.

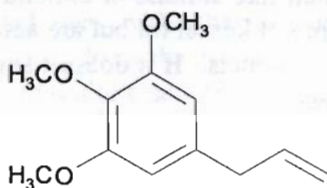
## OTHER INTERESTING THINGS THAT WE CAN FIND IN ALL SORTS OF DIFFERENT PLACES

You people won't believe the potential amphetamine precursors just sitting around in naturally occurring oils and essential oils [1]. Most of these things will make amphetamines that are much more potent than X. It is also possible to play around with some of the little side groups on these to eventually make X or some other interesting psychotomimetics. With few exceptions these precursors are all substituted allylbenzenes just like safrole. They are all found in the same kind of legal oils and sold in the same kinds of places as safrole. Finally, these precursors are turned into

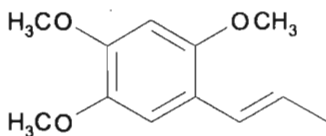
**Croweacin:** a very powerful amphetamine precursor which forms 90% of the oil obtained from the leaves and terminal branches of *Eriostemon crowei*. Good luck finding that one.



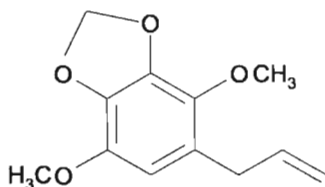
**Elemicin:** the precursor for TMA which is a mescaline-like amphetamine. Elemicin is the main constituent of manila elemi oil.



**Asarone:** this is another propenylbenzene whose amphetamine will produce a high like that of TMA but will be less hallucinogenic. It occurs in the oils of *Asarum arifolium*, *Asarum europaeum*, *Acorus calamus*, matico and calamus.

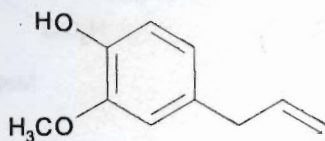


**Apiole:** like its cousin, dilapiole, produces a quasi-hallucinogenic amphetamine. It occurs in good percentages in parsley seed oil.





fras, nutmeg, laurel, myrrh, ylang ylang, and in *Asimum* species such as *Osimum gratisisimum*.



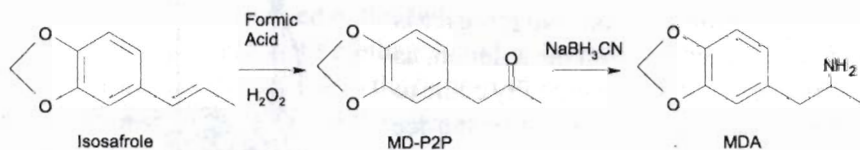
One of the more appealing things about eugenol, aside of its abundance, is that it can be purified from any of the oils in a very efficient manner. Unlike most of the constituents of these oils, eugenol has an OH (phenol) side group. If a quantity of oil is treated with a dilute (3-5%) NaOH solution the Na will form a temporary anion with the OH group thus bringing the eugenol into the water as a solid. The rest of the oil is merely drained away or extracted away with ether or some other solvent. The eugenol can then be released from the Na atom by acidifying the water layer it is in with some hydrochloric acid (HCl). The now oily eugenol can then be isolated from the water by solvent extraction. One now has some fairly pure eugenol. It is also of interest to note that eugenol can be simple distilled without vacuum and suffer no thermal degradation. This is an advantage for those who do not own distillation kits.

There are a lot of things that can be done to eugenol, some of which are alluded to in the **build from scratch** section of this fine book. A methoxy group can be made out of the phenol group to eventually afford a quasi-psychedelia amphetamine called DMA. Friedel-crafts-like additions can form TMA or TMA-like amphetamines (don't ask). But, most importantly (depending on who is asked), the methoxy group can be demethylated and the subsequent 'allylpyrocatechol' can be methylenated to form 3,4-methylenedioxy-1-allylbenzene which just happens to be (ta da!) safrole (please don't ask)!

# **STRIKE'S TOP 10**

This is a double procedure method. The first half is here to provide an extreme amount of details on how to successfully make MD-P2P from isosafrole using a very good method that has been around for quite awhile but has never been given a proper, detailed description. The second half of this method is the reason this whole thing is number 1. The conversion of MD-P2P to MDA using sodiumcyanoborohydride ( $\text{NaBH}_3\text{CN}$ ) is the easiest, cleanest and highest yielding amination procedure Strike has ever known. Strike realizes that it seems like Strike is already breaking Strike's own rules by including a chemical as complex sounding as  $\text{NaBH}_3\text{CN}$ , but the payoff is so incredible that Strike must make this one exception.  $\text{NaBH}_3\text{CN}$  is a little pricey but is still legal to purchase. Yet, Strike feels this chemical is so important that Strike has devoted an extensive amount of space in the **chemicals** section of this book on how this catalyst can be made.

The procedure Strike is about to describe is easy, safe, done on the counter top almost entirely at room temperature and is impossible to fuck up unless done by a total idiot. The reaction progresses via the following diagram:



The starting material is isosafrole (or propenylbenzene for speed) which can be easily made from safrole as described in the safrole chapter or can be made from scratch later on in this fine book.

The production of MD-P2P or P2P using this method has been previously described [7,17] except that Strike is going to describe the little things. You know, those little bullshit things that never seem to work their way into official accounts but always cause a lot of stress to the novice chemist.

A large flask or glass tea jug is placed in a tray of ice on top a magnetic stir plate. Into the flask is poured 340g of 30% hydrogen peroxide ( $\text{H}_2\text{O}_2$ , always store this chemical in the fridge or it will degrade over time)

way is to just keep on distilling the solution until all of the formic acid has been removed. The chemist knows that just about all the formic has been removed when there is about 300mL of thick black liquid remaining in the reaction flask and hardly any clear formic acid is dripping over into the collection flask. If one were to swirl the reaction flask, the liquid will appear syrupy and kind of coat the sides of the flask. This more evident when the flask cools. A quick sniff of the flask may indicate that some formic is still in there but it should be too minimal to be of any concern.

The problem with removing large amounts of formic acid by distillation is that it takes a long time to do so. Really big batches can take an entire day to distill. So a second option [18] after removal of the acetone would be to cool the formic acid solution then extract the whole thing with ether. The black ether layer is then washed with a ice cold 5% sodium carbonate ( $\text{Na}_2\text{CO}_3$ ) solution to neutralize any formic acid that was carried over, then washed once with clean water. The ether is distilled off to give a black heavy mass just as would have been attained by removal of formic acid by distillation except that it was done in a fraction of the time.

Either way, the chemist is going to be staring at a black syrup in the bottom of her flask. Into it she pours 500mL methanol and 2500mL 15% sulfuric acid solution. If the chemist does not have a big enough flask the stuff will need to be halved or thirdded and processed in batches. As soon as the sulfuric solution hits the methanol/product (oxime) layer the heavy black oil will form beads and sink to the bottom. The solution itself will get kind of milky and hazy. Now all the chemist does is slap a condenser into the flask just like fig. 7a and reflux for three hours. After such time, the solution is allowed to cool down to room temperature. Now, in large batches like this and those that are even larger than this one, its just not feasible to extract all that liquid with solvent to remove all the oil. Just about all the oil is sitting at the bottom of the flask. So the chemist decants (pours off) as much of the water as possible, adds fresh water, stirs, decants the water, adds new fresh water, etc.. Three washings of water should remove any traces of  $\text{H}_2\text{SO}_4$  left in the oil.

Technically, if the chemist wanted to do things by the book, she would extract the whole  $\text{H}_2\text{SO}_4$ /oil solution with ether, then wash the ether with water. So the oil (which is now MD-P2P, by the way) is transferred to a small flask using ether and vacuum distilled. After all the ether and water have come over and the receiving flask has been exchanged with a clean,



the solvent. So the chemist extracts the HCl/MDA solution with a few hundred mLs of DCM (a.k.a. methylene chloride, or dichloromethane) and saves the DCM to recover the MD-P2P for later use. Technically, the concentrate is supposed to be dissolved in DCM and then 'extracted ' three times with about 500mL of 3N HCl each. Strike's way works just as well.

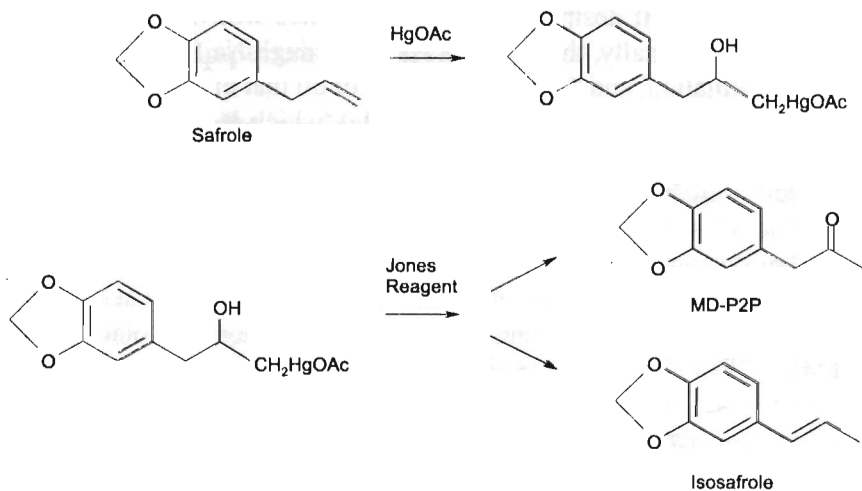
After the DCM is separated from the HCl/MDA, it's time to release the MDA from the water. To do this the chemist has to make some saturated sodium hydroxide solution. A saturated solution is made by dissolving as much sodium hydroxide as possible in an amount of water (say, 500mL). This NaOH solution should be chilled in the freezer. So, the chemist is going to place her MDA/HCl solution in a PP container and chill it in an ice bath tray with stirring. Next she starts adding the cold NaOH solution in small increments so that bubbling wont get out of hand. The solution will start to get warm and slowly turn basic. At around pH 9 beautiful, clear-amber beads of MDA freebase oil will appear all about the solution (most of it settling at the bottom) and the chemist adds a little more base to insure an excess so that all MDA will separate out. This is one of the more pleasant events of drug chemistry.

Now the chemist need only extract the MDA oil from the water with some DCM. Yes, this time the MDA will go into the DCM. The chemist merely pours about 400mLs of DCM into the container and stirs it really well for a few minutes while she watches TV. As much of the water as possible is poured off or separated in a separatory funnel and then the DCM layer is dried through 100g of sodium sulfate ( see **methodology** chapter). The DCM is then removed by simple or vacuum distillation to afford a clear, light-amber MDA freebase. This oil is so clean as is that it can be crystallized without distillation. If one wanted to, they could distill it to get rid of the color impurities, but there is so little contamination and, besides, what little there is will separate out in the process of crystallizing the product for consumer usage ( see **crystallization** chapter).

The yield here is 80-90%. No, that is not bullshit! This method has not been given the proper credit it deserves and sometimes has been dismissed without due process. Does Strike sound defensive? You bet! Strike has been in the science game for a long time and knows that bitterness, doubt and contempt abound. But that's ok, because those who do not use this method simply get hammered by those who do!



Could something this easy really work? Actually, yes! Safrole is converted to MD-P-2-P in about 8 hours with no watched chemicals and a yield of 70%-80% [31]. The reaction is shown in the accompanying diagram.



This will work for conversion of allylbenzene to P-2-P. And the bonus is that the major side product is isosafrole. The mercury (II) salts that one can use are **mercuric acetate ( $\text{HgOAc}$ )**, which can be made quantitatively (100% bubba) from mercuric oxide ( **$\text{HgO}$** ) and acetic acid (why anyone would do that is beyond Strike since **the** stuff is easily purchased), or mercuric propionate made from  $\text{HgO}$  and propionic acid. The oxidation of the intermediate alcohol is achieved by using Jones reagent [32]. An 8M solution of Jones reagent is made mixing 267g of cold chromic acid ( $\text{CrO}_3$ ) 230mL cold  $\text{H}_2\text{SO}_4$  and 400mL cold  $\text{dH}_2\text{O}$  then the solution is brought up to a final volume of 1L with  $\text{dH}_2\text{O}$  (or can be purchased). The working concentration that one wants is 2M so the chemist mixes 125mL 8M stock with 375mL  $\text{dH}_2\text{O}$ .

The chemist now gives her knuckles a crack and begins. An appropriate sized flask or PP container is placed in a tray of water on the stirplate. Into the flask is dumped 800mL acetone, 25mL  $\text{dH}_2\text{O}$  and 32g  $\text{HgOAc}$ . This is stirred a little, then 82g of safrole is slowly poured in. The solution should be bright yellow. Now, 375mL of 2M Jones reagent is added drop

minutes during which time the MD-P2P-bisulfite complex will be busted up and the P2P will return to its happy oil form. The P2P is then taken up with ether, dried and removed of the solvent to give pure MD-P2P. A side note to this procedure is that the mercuric acetate is not destroyed after it exerts its action on the safrole. A wise chemist will purify this valuable commodity from the aqueous phase of the reaction mix so it can be used over and over again

**Warning: very important message to follow...**

Now that Strike has finally been able to include this little bit about purification of P2Ps using sodium bisulfite, it is now time to explain something that Strike has been privy to for quite awhile. You know how Strike said that effective chemistry is not achievable without a distillation apparatus? Well, that is not necessarily true. Sure it is nice and convenient to use, but try and follow the logic line that Strike is about to lay on you. If one were to start with sassafras oil and crudely purify it with NaOH washings and boiling on the stove, and then if one were to make MD-P2P by either of the **top 10 #s 1-3**, all the while removing the solvents by simply boiling them away under the hood, then one would end up with crude P2P with some other oil junk. Right? Right. Now suppose one were to purify that P2P using the bisulfite procedure and then convert that P2P to MDA using the ultra clean procedures and HCl cleanup extractions of **top 10 #s 1 & 4** (again just boiling off any solvents)? Strike is telling you that what can happen is the production of product without ever using a distillation apparatus. Ever! And these little sub-procedures are not exclusive to the particular recipes that happen to be written up in. They can be applied to many of the methods throughout this book. An underground chemist will never be at a disadvantage if she understand her chemistry and can notice the subtle connections that all of these recipes have. Nothing is impossible!

As one can see, the major side product of the reaction is not tar or junk but is the very useable isosafrole. This is just another illustration of the desire of the safrole double bond migrate to the isosafrole position when given the chance. The cuprous chloride ( $\text{CuCl}$ ) and oxygen are there to promote and keep the  $\text{PdCl}_2$  in a +2 state (don't ask). There are two different apparatus setups that a chemist can use to complete this recipe depending on the equipment available. Figure 10a shows a setup using a three neck flask and figure 10b shows how the same system can be attained using a single neck flask.

No matter which flask is used, an addition funnel is required. An addition funnel is just like a separatory funnel except there is an extra side arm that allows for addition into a system that has pressure (which this one is going to have). Strike knows! Strike knows! Pressure sounds complicated but this one isn't. You'll see. The addition funnel can be bought, made from a separatory funnel as explained in the **how to make** section of this book, or can be made entirely from scratch as suggested in the same section.

The pressure is going to come from oxygen that is applied to the system using a balloon. Pure oxygen is easy to get. The chemist can get it from the neighborhood specialty gas cylinder company or she can plow through the grannies down at the local pharmacy and get a small, personal use bottle there. The oxygen is then used to fill up one of those thick walled carnival balloons that can be bought at any toy store.

The idea is to have everything in place before the oxygen is applied. So, 100g of safrole is in the addition funnel and stirring around in the reaction flask are 10.6g of  $\text{PdCl}_2$ , 60g  $\text{CuCl}$  and 500mL of aqueous dimethylformamide (made by mixing 62.5mL  $\text{dH}_2\text{O}$  and 437.5mL DMF). Dimethylformamide (DMF) is not the same as the watched chemical known as N-methylformamide. DMF is a common, legal solvent. If a three neck flask is being used then the openings on top of the addition funnel and the unused neck of the flask are plugged with stoppers and the stoppers secured in place with wire or strong tape. With everything all set the chemist fills up a balloon with oxygen, pinches it closed with her fingers, wraps the end over whichever opening is appropriate and releases. This setup can look pretty cool depending on what kind of balloon the chemist chose. Maybe one of the three foot elliptical kind or one with a ducky printed on it.



this either. The isosafrole fraction will smell like licorice but MD-P2P always smells different relative to the type of reaction it is borne from. Pure MD-P2P doesn't have that strong a smell and can usually be overpowered by impurities that will always carry over with it from the reaction it came from. So MD-P2P that comes from a reaction using formic acid or mercury compounds is going to smell a little differently than one that came from a reaction using palladium. However, the distinction between isosafrole/safrole and MD-P2P is quite evident. In the end, a little of one in the other is not going to hurt things much.

Of course the chemist may wish to forego purification and separation of the two remaining oils by distillation and opt for the sodium bisulfite procedure shown in **top 10 #2**. That particular method is perfectly suited for this situation.

If using oxygen balloons is not one's cup of tea, then there are ways to supply the oxygen without it. It has been demonstrated that using quinone (benzoquinone) can accomplish the same thing [34]. To do this one has all the ingredients, including the safrole and quinone, stirring in the reaction flask except for the water that was mixed with the DMF. That water is going to be the thing that is placed in the addition funnel and added to the reaction mix. Another oxygen source can be that of 30% hydrogen peroxide [35]. This procedure is done exactly as the regular method except that the aqueous DMF is made with 30% hydrogen peroxide instead of plain  $\text{dH}_2\text{O}$ .

Other alternatives for this procedure can make it even more versatile. To decrease that 24hr span of incubation/stirring one can run the entire reaction at 60-70°C from the beginning of addition. The reaction need only proceed for about 3 hours. The down side is that a three neck will have to be used to accommodate a thermometer and reflux condenser. Another switch can be made by using cupric chloride ( $\text{CuCl}_2$ ) instead of cuprous chloride ( $\text{CuCl}$ ). Both work equally well except that  $\text{CuCl}_2$  has a tendency to chlorinate the product slightly.

Finally, it must be restated that the biggest plus of this recipe is that it produces 70-80% MD-P2P or P2P, and 20-30% isosafrole or propenylbenzene as a side product. So if the chemist were to turn around and process that isosafrole using, say, the formic acid method from **top 10 #1**, then the potential P2P production from this method could climb to well over 90%!



Either way, the happy little foil pieces end up lying at the bottom of the flask ready to be turned into a catalyst. To do this the chemist pours a solution of 1.3g mercuric chloride ( $\text{HgCl}_2$ ) dissolved in 1700mL  $\text{dH}_2\text{O}$  and stirring is started. The Hg starts to immediately react with the aluminum. Effervescent bubbling will be fierce and the solution will start to get really hot. This is allowed to continue for 15-30 minutes during which time the stirring solution will get cloudy grey with metal particles from the degradation of the aluminum.

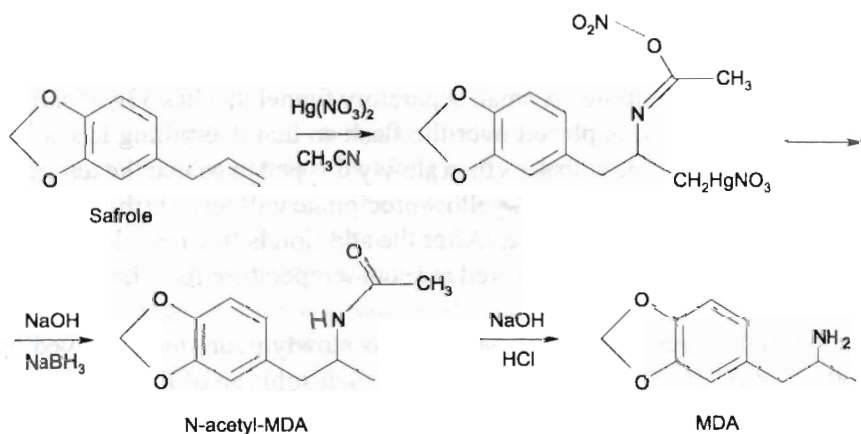
There are a couple of notes to consider here. Just about all of that powdered dust is amalgamated catalyst, which is great except that almost all of it will be lost in the next cleanup step. One can make up for the loss of catalyst by increasing the aluminum batch size, but care is necessary in doing this. There is a danger point in making too big a batch of  $\text{AlHg}$ . Beyond the size of a 150g of Al, the reaction may overwhelm the water it is in and a boiling, volcanic steam cloud may erupt. It can get freaky! Also, the amount of  $\text{HgCl}_2$  should not be increased beyond the ratio given here because it will pulverize all the aluminum very quickly leaving nothing but dust.

After 15-30 minutes the water is decanted from the catalyst leaving just enough to cover the metal chunks. If the catalyst is exposed to air it quickly degrades. The aluminum is then washed 4 times with fresh  $\text{dH}_2\text{O}$  decanting each washing so that a little water remains to cover. In the clean water the catalyst looks to be frosted with grey dust and is now ready for the big reaction. After the last decanting the chemist, in rapid fire succession, dumps the following ingredients into the flask holding the catalyst in the exact order as follows:

- (1) 76g methylamine-HCl in 76mL  $\text{dH}_2\text{O}$
- (2) 230mL isopropyl alcohol
- (3) 183 mL 25% aqueous NaOH solution
- (4) 67g MD-P2P or 50g P2P
- (5) 440mL isopropyl alcohol

The flask is placed in a plastic tray because an ice bath maybe necessary and stirring is again started. Ice is added as necessary so that the temperature stays below  $50^\circ\text{C}$  and the solution stirs this way for 3 hours. The solution looks very heterogenous. By this Strike means that all sorts of junk is swirling around in the flask. Amber beads of P2P go flying by as do chunks of foil, grey dust, and frosted beads of oil.

If you read the excellent book called "Recreational Drugs" by Professor Buzz you may come across a little recipe in the amphetamine section for something called N-acetyl-phenethylamine. So what the hell is that? Well, actually it happens to be one step away from being an amphetamine but no one makes this clear to all the novices reading the book. Strike means to say that even novices just reading for pleasure need a little help here and there. It's a pity because this is a really good recipe using unwatched chemicals and is a more direct way of aminating safrole or allylbenzene without having to go through the making of an intermediate such as MD-P2P or P2P. Actually, Strike is under the distinct impression that Professor Buzz got this recipe from the progenitor of underground chemistry books: "Psychedelic Chemistry" by Michael Valentine Smith. Unfortunately, both these authors simply copied commentary from the actual scientific article [20] without any elaboration towards the final outcome. Strike feels that you may find such elaboration here.



This is almost a one pot production and uses a simpler borohydride catalyst ( $\text{NaBH}_3$ ) than others that are out there. These catalysts are very clean in their action yet very gentle on the molecule as a whole. And here we are again talking about another method that involves a mercury II salt (don't ask). So far there has been mercuric acetate in two different methods, mercuric chloride in the amalgamation of aluminum and now we have mercuric nitrate in this method which is kind of similar to that in **top 10 #2**.

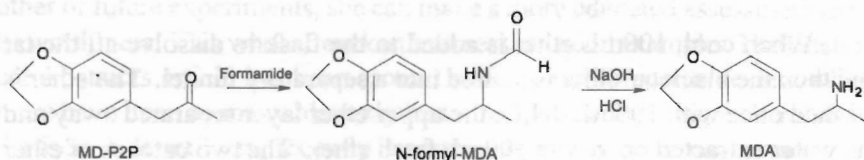
This happy acetyl intermediate is just one hydrolysis away from being MDA or benzedrine. By hydrolysis Strike means that by using simple acid or base one can chop off that acetyl group that is stuck to the nitrogen and replace it with a hydrogen thus giving the chemist her final freebase. Hydrolysis is going to show up a lot in this book so let's discuss the two ways to do it. To that acetyl oil sitting alone in the bottom of the flask is added either 500mL of 15% aqueous HCl solution (HCl in water, bubba!) or 500mL of 20% aqueous NaOH with 100mL ethanol and the solution refluxed for 5 hours. MDA is now in the pot. If the chemist hydrolyzed with HCl then she basifies the solution with concentrated NaOH solution until the pH is 9 and all the little droplets of freebase oil have been released. She then extracts the oil with either benzene, ether or dcm (chemists choice), dries the solvent through  $\text{Na}_2\text{SO}_4$  and distills away the solvent to get product. If NaOH was used to hydrolyze then solution is cooled, extracted with ether, dried and distilled to give product. Either way the yield is ~80%.

The method Strike just described was an extension of an earlier published report [21] in which things were produced a little differently but bear description here because it has applicability as an alternative for those unwilling or unable to do the previous, unbelievably easy process. Besides, it's good to see how science progresses.

The acetonitrile and mercuric nitrate amounts remain the same except they are to be accompanied by 12.6g of fuming nitric acid (see **chemicals** section) in the reaction flask. Then, with cooling, the safrole or allylbenzene is added just like before. The reaction is immediate and takes no more than 20 minutes of stirring after which 100mL ice cold  $\text{dH}_2\text{O}$  is slowly added. Next, **with vigorous stirring**, saturated sodium chloride solution is slowly added until a pronounced precipitate forms. This yellowish mass is the chloride, not hydrochloride, of the acetamino-safrole intermediate (don't ask). The chemist wants to keep these crystals so the solution is vacuum filtrated and the filter cake washed with a little clean  $\text{dH}_2\text{O}$ . 40g of the filter cake is scrapped into a flask containing 160mL  $\text{dH}_2\text{O}$ , 14 mL 6M NaOH and 0.4M of 2% sodium amalgam (a catalyst, see **chemicals** section) and the solution stirred for 3 hours. Again, the precipitate will grey and elemental mercury will fall to the bottom of the flask. After 3 hours the solution is decanted into a filter (the mercury stays behind in the flask), and the flask with mercury is washed with 100mL ether which is also decanted into the afore mentioned filter. The ether drips through the filter cake then the filter is washed through once more with 100mL fresh ether. Both ether



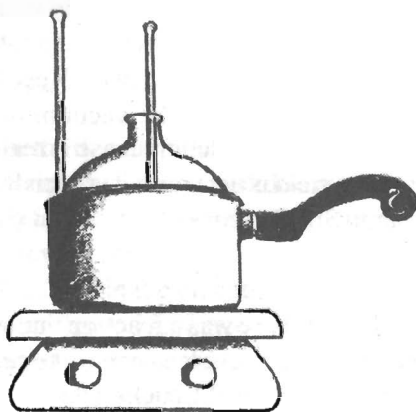
Oh the misery this method has caused Strike! This method is called the Leuckart reaction and it converts P2Ps into amphetamines or methamphetamines as shown below. This method is very simple to do but has been grossly misreported, especially where its applicability to X production is concerned. The method that's been floating around the longest for X is the one found in chemical abstracts [17]. This method works but it is very



messy and the yields suck (about 20%). Strike is going to detail how this method works, but a few paragraphs away Strike is going to lay down lots of ways that this method can be better for both X and speed production.

23g of MD-P2P or 17g of P2P that was made by any method and 65g formamide ( $\text{HCONH}_2$ ) is poured into a small Pyrex flask (sorry, glass is a no-no here). If one wanted to make meth or MDMA then one would use 60g of a chemical called N-methylformamide instead of formamide. However, this chemical is extremely watched because of its use in this recipe so it is not something Strike would expect an underground chemist would use. This flask is placed in an oil bath which is merely an aluminum sauce pan with enough corn oil in it to equal the height of the liquid in the flask. A thermometer is placed in the flask and another one placed in the oil so that the whole setup looks like figure 11.

Stirring is started and heat is applied so that the oil and reaction mix achieve a temperature of about  $120^\circ\text{C}$  in about an hours time. It is at this point that  $\text{CO}_2$  bubbles will begin to emerge signaling that the reaction has begun. Some



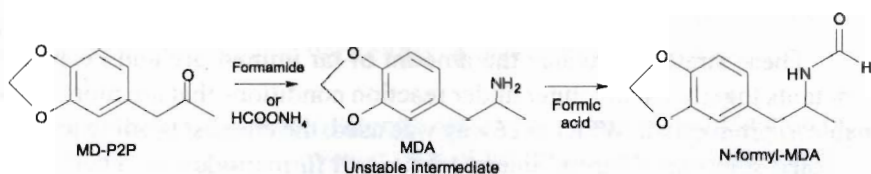
[fig 11]



make steady reasonable supplies of X and should not be used to process more than 100g of P2P at a time. In fact, it shouldn't be used to make any drugs at all. You see that would be illegal.

Strike's mission with this book is to provide as many methods for a conversion as possible. Slight corrections to a recipe can make a great difference and to become a truly great chemist one should be aware of both the good ways and the bad ways and what it was that made one recipe a poor one and another a good one. Then, when a chemist comes across other or future experiments, she can make a more educated assessment as to its worthiness. This whole Leuckart business is a good example. The Chemical Abstracts article has been around so long and its merits so few when there have been so many blatantly better recipes staring illegal chemists in the face. Not until very recently has some correction been made in some of the underground literature. Folks interested in speed manufacture should read this closely. It all relates in every way to the betterment of methamphetamine synthesis.

The Leuckart reaction was originally conceived using a chemical called ammonium formate ( $\text{HCOONH}_4$ ) which is very similar to formamide ( $\text{HCONH}_2$ ) [22]. It is pretty much believed that this molecule donates its ammonium part to the P2P and then the formate part turns into formic acid ( $\text{HCOOH}$ ) which then acts to reduce the intermediate into its stable formyl derivative (don't ask).



If one is using formamide or N-methylformamide then one is not going to have the advantage of creating formic acid as a breakdown product, so the idea is to have formic acid already in the reaction mix. To do this one takes the 65g of formamide and mixes it with 30g of 88% formic acid (the same stuff used in **top 10 #1**), places this flask in the oil bath and attaches a simple distillation set up to it as shown in figure 12. Since the formic acid has some water in it the chemist is going to remove that water by heating the oil bath to 160-170°C and allowing the water to distill over with no vacuum. When no more water distills over the chemist allows the reaction

the solution has cooled all one needs to do is extract with ether to obtain the MDA oil because using NaOH means that the MDA stays as an oil throughout. A really frugal chemist can do one extra thing to help herself out. She can take that ether/MDA layer and mix it with a few hundred mLs of 3N HCl. This, as usual, will cause the MDA to go into the water layer but what is going to be left behind in the ether besides tar is going to be a lot of unreacted, valuable P2P. The chemist saves that layer to deal with its P2P payload at another time. Meanwhile, all that remains is for the chemist to release the MDA from the water/HCl by basifying and extracting with ether.

Of course, there are a couple advantages to using HCl as the hydrolyzer. Since using hydrochloric acid means that all that fat MDA or amphetamine is in the water solution, the chemist can vacuum filter the solution to get rid of all the tar and crap which will give a remarkably clean water solution. The X is released by basifying and extracting with solvent.

Since the formamide reaction solution is going to be a lot cleaner than the tarry mess of the original recipe the chemist has yet another option to explore. Instead of hydrolyzing in the reaction pot, the chemist can add 500mL of clean  $\text{dH}_2\text{O}$  and stir just like in the crappy original method except that this time the chemist is going to look for a heavy oil layer that will settle at the bottom. The upper water layer is decanted from the oil layer. That water, by the way, can be acidified with HCl to form crystals of formamide that can be isolated for reuse. The heavy oil layer, alone at the bottom of the flask can be hydrolyzed as is with either 10% HCl or 10% NaOH. The chemist, by now, should know the general differences and outcomes of hydrolyzing with either of these two compounds.

By utilizing the improvements stated above in any combination preferable to the chemist, convenience will be enhanced and yield will jump from around 20% to that of 50%. Not bad, but there is one more oddball form of the Leuckart reaction that was devised specifically for X production and produces a yield of 70%! This little procedure [25] has been around for 40 years and has, until recently, failed to be reported as a superior Leuckart conversion method by underground sources. This sort of thing really frustrates Strike.

This procedure works equally well for both X and speed production. The set up used is the same as fig. 12 (remember, no vacuum) and into the reaction flask is placed 275 mL formamide, 80g MD-P2P or 70g P2P, and

distillation. It can happen, one only needs have confidence in the chemistry.

### **A special note for those interested in top 10 #'s 5 & 6**

You see how in **top 10 #5** the chemist hydrolyzed an acetyl-MDA to get MDA, and how in **top 10 #6** the chemist hydrolyzed a formyl-MDA to get MDA? Well, if instead of hydrolyzing the intermediates, which is, unavoidably, a slightly destructive process, the chemist could react them with the catalyst known as lithium aluminum hydride ( $\text{LiAlH}_4$ ) with some very interesting outcomes.

Whether you are aware of it or not,  $\text{LiAlH}_4$  is a tricky chemical to get. It is not a controlled substance so one can order it, but it is so often used in underground chemistry that it is very watched. This catalyst has so many applications in this book that this is going to be the one vice that a clandestine chemist will allow herself.  $\text{LiAlH}_4$  is becoming such a common reducing agent that a chemist may be able to get it at some of the over the counter stores. In such a case the chemist would want a friend to do the buying. Of course the chemist can order this to a friends house but that is going to have to be the last time the chemist ever uses that particular friend again. Once ordered, the chemist's friend straps the chemical to the back of a trained cat and sends the bundle through the sewer system to the chemists house. In the end, this catalyst can be made fairly easily as outlined in the **chemicals** section.

So what is so great about all this that one would need to get such a chemical? Aside of all the other conversions in this book,  $\text{LiAlH}_4$  can take that acetyl-MDA and instead of cleaving it between the nitrogen and the carbon, it will simply strip away the oxygen to give the very usable and mild MDEA (a real hit with the ladies). And with the formyl-MDA it will strip away the oxygen to give MDMA of all things [19,26].

You see, this is a way that people can make meth or MDMA using the Leuckart reaction without having to risk the purchase of N-methylformamide. For those people who prefer the milder substituted versions of MDA but find that the chemicals to make them are too restricted, this is a way around all that.



So let's sum up:

- a) this is an excellent way to make MDMA, meth, MDEA or PEA without using the perilous chemicals normally needed.
- b) the clean, gentle hydrolysis afforded by  $\text{LiAlH}_4$  lets the evil chemist avoid product loss by acid/base hydrolysis which will cause limited destruction and occasional methylenedioxy ring cleavage.



and side reactions (don't ask). What the chemist has available to her commercially is 48% HBr in  $\text{H}_2\text{O}$ . 48% aqueous HBr can also be made with  $\text{H}_2\text{SO}_4$  and potassium bromide (see **chemicals** section). That product is okay but what is preferable is 48% HBr in acetic acid instead of water because the safrole oil will better dissolve in this than it would in water. HBr in acetic acid is sold commercially, is perfectly legal to buy and may be the best option an underground chemist has to brominate her safrole, but what is the most preferable avenue for a chemist is to make a concentrated HBr solution herself. It is also worth noting that hydroiodic acid (HI) will work as well or better in place of HBr except that it's more expensive and highly watched.

To make her own HBr solution the chemist needs to go down to the local specialty gas supplier. These sorts of businesses sell tanks of oxygen to hospitals, acetylene tanks to welding shops and, yes, HBr to underground chemists. The chemist places 200g of acetic acid in a small PP container or flask and then weighs the flask with its contents. Next, the flask is stirred in an ice bath tray that has just a small amount of ice to keep the contents cool and HBr from the tank is slowly bubbled into the acetic acid. Ever so often the chemist will stop the bubbling and reweigh the flask to see how much weight in HBr it has gained. Ideally, the chemist would like to have around 150g of HBr in that acetic acid which is now quite orangy in color.

To proceed, the chemist keeps her concentrated homemade solution [27,29] in the same flask in the ice bath, or she can use 500mL 48% aqueous or acetic acid based HBr solution and place it in a flask in the ice bath. The setup is going to look exactly like the one seen in fig. 9. In the separatory funnel is placed 137g of safrole or 100g allylbenzene. The HBr/acetic acid solution is stirring in the ice bath til it is between 5-10°C (if it gets too cold the acetic acid will turn to ice) then the safrole is slowly dripped in. The oil will bead up on the surface and when addition is complete there will be two distinct orange layers if stirring were stopped. But good, constant stirring assures that everything comes in contact with everything else. After addition is complete the solution is allowed to come to room temperature slowly by letting the ice melt away then the solution is covered with foil and stirred at room temperature for 24 hours. After such time the solution will be a single layered burgundy solution. The chemist pours this solution into a container of 300mL cold water and 500g crushed ice made earlier from  $\text{dH}_2\text{O}$ . Things will look lavender in color with the heavy bromo-safrole sitting at the bottom. The bromo-safrole is separated from the water and

is attached and the solution slowly brought to reflux over an hours time. The solution is refluxed for 24 hours, cooled, 100mL ether is added and the entire solution slowly poured into 1000mL of dH<sub>2</sub>O. The upper ether layer is separated, the bottom water layer extracted once with 100mL more ether and the two ether fractions combined and dried through Na<sub>2</sub>SO<sub>4</sub>. The chemist now vacuum distills the ether/azide fraction to get what is now safrole-azide (yield=50%).

A much greater yield can be had if the chemist uses carbitol as a solvent instead of propanol [37]. Carbitol is a really hazardous solvent and should not be breathed or placed on ones skin. The reaction proceeds exactly as before except that after 24 hours of reflux and cooling the mixture is slowly poured into 1500mL ice cold dH<sub>2</sub>O. The upper solvent layer is separated and the aqueous layer extracted with 200mL ether which is then combined with that upper solvent layer. The combined solvent portions are vacuum distilled to afford safrole-azide (or phenylisopropyl-azide for amphetamine) with the yield rising to 70%.

A newer and equally effective way of swapping azides with halides (bromines or iodines) is in the use of phase transfer catalysts [43]. Strike wouldn't expect an underground chemist to purchase the exotic catalyst Aliquat 336 which the investigators in this reference used to get yields approaching 100% but an alternative catalyst of butylamine is offered as an effective alternate with yields approaching 75%. The figure 9 set up is again used with 100g bromo-safrole (80g phenylisopropyl-bromide), 30mL dH<sub>2</sub>O and 50g sodium azide are stirred in the reaction flask. 5g of butylamine is dripped in, a condenser is attached, the solution slowly brought to reflux and kept there for 6 hours. After cooling, the solution is extracted with ether, dried through Na<sub>2</sub>SO<sub>4</sub> and distilled to provide the azide product. The chemist should keep in mind that here, as with the previous two azide procedures, will be a significant amount of salvageable isosafrole formed as a byproduct.

One of the ways that this azide method is going to make it resistant to intervention by law enforcement is that the azide species comes in so many forms aside of plain old sodium azide such as potassium azide, phenyl azide, trimethylsilyl azide [44] etc.. However, what makes this method so stellar is the number of ways this azide can be reduced to the final amine of MDA or amphetamine. When most underground methods introduce that precious nitrogen there is always a catch. Usually there is a formyl or acetyl group

sively at room temperature with no pressure and give almost 100% yields are to follow. The only reason Strike did not detail these methods is that some of the chemicals involved are little less common than Strike is used to but all are available to the public. These alternatives include: acetylacetone and triethylamine [48], propanedithiol and triethylamine [49], triphenylphosphine [50],  $\text{NaBH}_3$  with phase transfer catalyst [51],  $\text{H}_2\text{S}$  and pyridine [52], and palladium hydroxide/carbon with hydrazine [53].



py, destructive ways. Sometimes the expensive high pressure catalysts and cracked chemical called methylamine. Unique position because the mechanism can be flicked off and replaced with useful in producing almost 100% yields.

Methods to reduce such as pressure reaction Na amalgam. Until recently the most

To do this the chemist mixes 50g of ether and slowly drips this solution 200mL anhydrous ether. After additions, during which time the chemist will unless nitrogen gas ( $N_2$ ) being evolved.  $H_2O$  is added to destroy the catalyst, and to give MDA at yields of 70%.

are, hands down, the ways to go for azide or 160g phenylisopropyl-azide in a well-stocked ice bath with stirring. Magnesium (Mg) powder or 60g calcium form down at the pharmacy or in the health food store (you know, Strike thinks hippie health food stores). This powder in small increments. Almost immediately. The bubbling is released  $N_2$  gas is working. The solution stirs in that's it. The methanol is removed by L ice cold  $dH_2O$  added to the residual pH is adjusted to between 9-10 with NaCl. This solution is extracted with NaCl solution then dried through distillation will give MDA or amphet-

using stannous chloride (a.k.a.  $SnCl_2$ ), exactly as the calcium one except that of the Mg or Ca and the addition solution is stirred for one hour rather reductions that operate almost exclu-

sively at room temperature with no pressure and give almost 100% yields are to follow. The only reason Strike did not detail these methods is that some of the chemicals involved are little less common than Strike is used to but all are available to the public. These alternatives include: acetylacetone and triethylamine [48], propanedithiol and triethylamine [49], triphenylphosphine [50],  $NaBH_3$  with phase transfer catalyst [51],  $H_2S$  and pyridine [52], and palladium hydroxide/carbon with hydrazine [53].



Now, contrary to popular opinions, this method need not be conducted in a sealed pipe bomb. Secondary amination by substitution is as much a reaction of opportunity as it is of brute force and heat. In fact, heating can tend to cause the reformation of safrole and isosafrole. So the simplest way to do this would be to use 500mL of ammonium hydroxide or alcoholic ammonia or, for those wishing to make MDMA or meth, 40% aqueous methylamine or alcoholic methylamine. This 500mL is placed in a flask and into it is poured a solution of 35g bromosafrole (30g phenylisopropylbromide) mixed with 50mL methanol. The flask is stoppered and stirred at room temperature for anywhere from 3 to 7 days. The chemist could also reflux the same mixture for 6-12 hours or she could throw the whole mix into a sealed pipe bomb (see **how to make** section) and cook it for 5 hours in a 120-130°C oil bath.

When whichever reaction is complete, the excess ammonia and alcohol is distilled off. The exhaust coming from the vacuum or distillation apparatus must be channeled to the out of doors or bubbled into a container of NaOH solution because all that ammonia discharge will become devastating. The remaining liquid is acidified with 500ml 10% HCl solution and extracted with 100mL ether. By now you readers realize that the MDA product will remain in that acid water and extracting with ether will remove valuable unreacted safrole, isosafrole and bromo compound. The ether is separated and the water layer, which is normally brownish gray at this point, is basified with concentrated NaOH solution and then will appear dark brown droplets of you-know-what. You-know-what is extracted from the solution with ether or some other solvent, dried through  $\text{Na}_2\text{SO}_4$  and removed of solvent by distillation to afford you-know-what.

Right about now the chemist is probably screaming, "Hey, where the hell is my big yield of you-know-what?!". Sorry, Charlie. This way of aminating is easy but chemically it's a crap shoot with yields anywhere from 10-50%. The theoretical odds are against the reaction but if it is done as outlined here, the chances of success are better.

This procedure has been performed in a variety of ways [5 p714, 54-58] with variations in solvent, base and time of reaction. For piperonal conversion, the consensus is toward the use of acetic acid as the solvent, ammonium acetate as the base and 4 hours of reflux time. Dr. Alexander Shulgin, a giant in this field, prefers the use of cyclohexylamine as the base. Strike would not tend to doubt this man's choice especially since Strike is also getting the feeling that ammonium acetate is heading towards the schedule I graveyard.

In a flask the chemist mixes 50g piperonal into 200mL glacial acetic acid, then adds 45mL nitroethane and 17g ammonium acetate. The solution is then refluxed 4 hours and takes on the color of yellow to yellow-orange. After 4 hours and cooling, yellowish crystals of  $\beta$ -nitropropene will spontaneously form. If not, the solution can be diluted with 50ml of  $\text{dH}_2\text{O}$  and chilled in an ice bath for an hour to form the crystals with some slushy glacial acetic acid and water intermixed. The mass of crystals is broken up and plopped into a Buchner funnel to be vacuum filtered. The filter cake is washed with a little extra acetic acid or water. All of the filtrate is saved.

These  $\beta$ -nitropropene crystals the chemist now has can be air-dried and used as is, but that is not advisable. What they need is a little more cleaning up, and one does this by performing recrystallization. To do this the chemist is going to use a solvent that everything in the reaction that the crystals came from is soluble in but that the crystals are not. Get it? No? Well, to demonstrate, the chemist will boil 200mL of methanol in a beaker and start knocking chunks of the impure  $\beta$ -nitropropene filter cake into the hot solvent. If all of the crystals will not dissolve in the 200mL of methanol then more is added and heated to accommodate. As soon as all the crystals are added and have dissolved, then the chemist turns off the heat and chills the mixture to 0-5°C. What is going to happen is that everything the chemist doesn't want will remain dissolved in the now cold methanol, but all of the  $\beta$ -nitropropene crystals will 'recrystallize' when cold. This solution is now vacuum filtered and the now clean crystal filter cake is washed with a little bit of extra, cold methanol just to make sure. That extra methanol washing and the filtrate can be reduced in volume by distillation and chilled to retrieve a second crop of  $\beta$ -nitropropene crystals (total conversion is around 70%). The final thing to add is that the chemist has a choice of

usual this is done by either drying the solvent through  $\text{Na}_2\text{SO}_4$  or by distillation.

Using the setup in fig. 9, the chemist stirs 55g of  $\text{LiAlH}_4$  in 200mL THF and adds dropwise to this a mixture of 50g  $\beta$ -nitropropene and 100mL THF from the separatory funnel. After addition the solution is refluxed for 24 hours during which time there will be the formation of a lot of white aluminum salt precipitates and the solution will also start to darken. The solution is cooled, 50mL  $\text{dH}_2\text{O}$  is added, and the solution is vacuum-filtered. The chemist washes the filter cake with a little extra THF and discards the filter cake. The filtrate is placed in a distillation setup, the THF removed under vacuum and, if desired, the dark MDA/amphetamine oil in the bottom can be distilled over as well to give clear yellow freebase. An alternative cleanup would be to forget about removing the THF and instead adding the solution to 200mL 0.5M  $\text{H}_2\text{SO}_4$ , extracting it with DCM then removing the DCM to get the freebase. Reduction using  $\text{LiAlH}_4$  gives yields from 60-80%. There is a very worthy alternative for reduction using  $\text{NaBH}_3$  that Strike feels has promise (but has not tried yet) but is worth a look [62].

The other option for processing  $\beta$ -nitropropenes is to turn them into P2Ps. The chemist has to do something with the stuff because if it sits around too long it's going to degrade. This procedure is really easy and has high yields [5 p734-735]. 32g elemental (electrolytic) iron (Fe) and 140mL glacial acetic acid are heated in a flask or beaker to around  $60^\circ\text{C}$  or, in more vague terms, to the temperature that is as hot as possible without the formation of white precipitates. One might want to do a couple of dry runs to determine the correct temperature. Into the hot mixture is slowly dripped a solution of 10g MD-nitropropene (that's the  $\beta$ -nitropropene made from piperonal) and 75mL glacial acetic acid. The dripping is adjusted so that the reaction does not become too violent or foamy. The color of the reaction will progress from orange to a deep red with the formation of white salt precipitates. After addition the solution is heated for an additional 1.5 hours at  $70^\circ\text{C}$  "during which time the body of the reaction mixture become(s) quite white with the product appear(ing) as a black oil climbing the sides of the beaker"[5, thanks Dr. Shulgin]. When cool, the reaction mix is added to 2L of  $\text{dH}_2\text{O}$ , extracted 2 times with 100mL DCM and the DCM extract washed with 1N NaOH solution. The DCM layer is vacuum distilled to give ~8g of pale yellow MD-P2P. Strike must say that that was a pretty easy one pot procedure using 2-3 simple chemicals with an 80-90% yield.

# FREE- FOR-ALL



the oil vacuum distilled to give 95% yellow oil which is a Schiff base intermediate. 1M of this intermediate, plus 1M iodomethane, is sealed in a pipe bomb that's dumped in boiling water for 5 hours giving an orangy-red heavy oil. The oil is taken up in methanol, 1/8 its volume of  $\text{dH}_2\text{O}$  is added and the solution refluxed for 30 minutes. Next, an equal volume of water is added and the whole solution boiled openly until no more odor of benzaldehyde is detected (smells like almond extract). The solution is acidified with acetic acid, washed with ether (discard ether), the MDMA or meth freebase liberated with NaOH and extracted with ether to afford a yield of 90% for meth and 65% for MDMA. That's not a bad conversion but what's with having to use benzaldehyde (a watched chemical)? Strike wonders if another aldehyde can substitute.

[61]--The folks in this article made an acetyl intermediate out of an amphetamine to act as a form of protection group so that they could screw around with the molecule without anything happening to that precious amine group. This method will end up yielding MDEA or PEA and will use the very watched acetic anhydride. This method is only for the weird. 80mL acetic anhydride is added to a solution of 10g MDA freebase, 50g sodium acetate and 300mL  $\text{dH}_2\text{O}$ , which is then shaken until the exothermic reaction ceases. The cooled solution is filtered and extracted with ether to give n-acetyl-MDA, which can be stripped of its oxygen just like was demonstrated in that little addendum after **top 10 #6**.

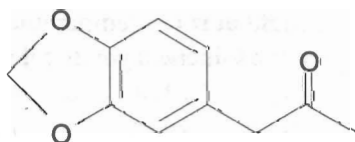
### Amphetamine(MDA) from P2P(MD-P2P)



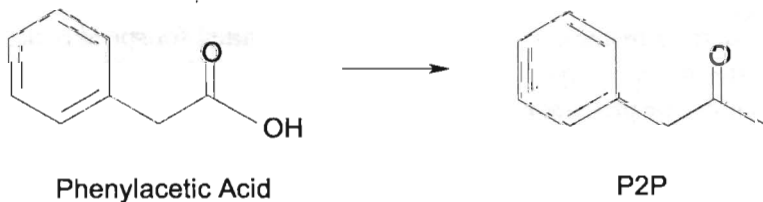
Before this section is started lets make something clear. Strike is well aware of all the ways that P2Ps can be converted to amphetamines or meth-amphetamines using catalysts such as palladium black, Raney-nickel and platinum in complex pressure apparatuses often using injections of hydrogen gas. These ways of conversion are relatively clean, with good yields but they are not what this book is about. Strike feels these ways to be too involved for those looking to make a decent profit while avoiding overly-complex setups or expensive catalysts. These ways of conversion are meant

$\text{dH}_2\text{O}$  is added a solution of 6g NaOH in 20mL  $\text{dH}_2\text{O}$ . This mix is then refluxed for 2 hours, diluted with 100mL  $\text{dH}_2\text{O}$ , acidified with HCl and extracted with ether to give a thick, red oil upon removal of the solvent. 10g of this ketoxime intermediate, 100g acetic acid and 50mL  $\text{dH}_2\text{O}$  are stirred together, then 300mL of 3% sodium amalgam catalyst (see **chemicals** section) is slowly added, then the solution stirred for 6 hours. The solution is basified with NaOH, extracted with ether and then the ether is extracted with 3N HCl. The free base is released from the acid water, extracted with ether, blah, blah blah. The yields from this type of procedure have been reported as high as 90% [67]. However, these results are from a group in the Netherlands which happens to be right next to Belgium. And from Belgium there came a punk that did Strike dirty. Yeah, you know who you are you piece of shit! If Strike doesn't catch up with you before Strike dies then Strike will definitely be waiting for you in hell, you coward! Anyway, there has also been proposed a way to reduce that ketoxime intermediate using  $\text{NaBH}_3$  instead of the harsher sodium amalgam [68].

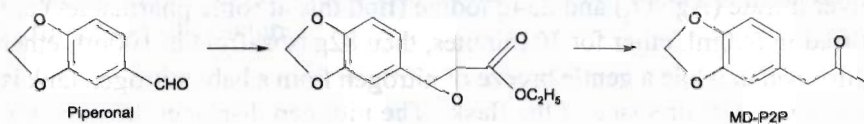
### Phenylacetones(MD-P2P or P2P)



These first two methods for making a P2P involve phenylacetic acid (a schedule I controlled substance). The one directly below involves another very touchy chemical: acetic anhydride. Strike has no idea why, but if you look at the **law and order** section you will see that as mere schedule II chemical acetic anhydride carries an enormous amount of jail time for possession of just a few grams. That makes this method kind of dicey but if the chemist has the chemicals then what the hell.



and 14g of chloroacetone is added dropwise from the addition funnel over a period of 30 minutes. After addition the solution is continued to reflux for 5 hours to give a black solution. While everything is in the same position, water is added from the addition funnel to destroy any remaining  $\text{AlCl}_3$ . This will cause more  $\text{HCl}$  gas to be evolved until all the catalyst is gone. After such a time 20mL  $\text{dH}_2\text{O}$  and 20mL concentrated  $\text{HCl}$  are added, the benzene layer separated and the aqueous layer is extracted once with benzene. Both benzene portions are combined, vacuum filtered, dried through  $\text{Na}_2\text{SO}_4$  and vacuum distilled. The first thing to distill over is benzene, then about 9g of a low boiling oil which will be the P2P and then 10g or so of black, high boiling crap that the chemist leaves behind in the reaction flask. The P2P can also be purified by making a sodium bisulfite addition product out of it which is outlined in this reference and also discussed in **top 10 #2**. This procedure can be scaled up to massive proportions.

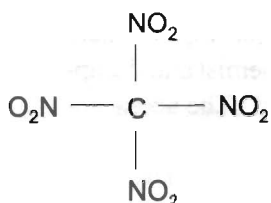


[36]--This is a little, oddball method that will transform piperonal or benzaldehyde into a quasi-cyclic intermediate that will lead directly to MD-P2P or P2P. Over a 4 hour period 23g of powdered sodium ethoxide is added to a stirred solution of 50g piperonal (40g benzaldehyde) and 61g  $\gamma$ -bromopropionate which is being chilled to below  $0^\circ\text{C}$  with a bath of ice and rock salt. After addition the solution is stirred for 12 hours at room temperature then for an additional 6 hours at reflux. Ice water is added and the solution acidified with dilute acetic acid. The solution is extracted with ether, the ether washed with dilute sodium carbonate solution and dried through  $\text{Na}_2\text{SO}_4$ . Distillation affords about 50% glycidic ester intermediate (don't ask). 35g of this intermediate is refluxed for 5 hours in 150mL 10%  $\text{NaOH}$  in ethanol. The ethanol is then removed by distillation, 500mL  $\text{dH}_2\text{O}$  is added to the residue and acidified with  $\text{HCl}$ . This acidified solution is extracted with ether and the ether layer separated. Remember, this is not an MDA or amphetamine we are talking about so acidifying is not going to bring this into the water. The ether is removed by simple distillation to give a residual oil. This oil remains alone in its flask and about 0.2g of copper powder is added. A condenser is placed on the flask and the oil is heated to  $180^\circ\text{C}$  for 18 hours. The procedure claims reflux occurs but Strike is doubtful that reflux as we know it will happen. After 18 hours the MD-P2P or P2P



[74-76]--Do not try this method! Strike repeats, do not try this method! This is the method popularized by Dr. Shulgin and reported in some of the underground literature [7] which uses the most dangerous compound in drug conversion chemistry that Strike is aware of: tetranitromethane. The reason this method keeps hanging around is because one can get clean, hyper yields of  $\beta$ -nitropropenes in less than 5 minutes. But the ultimate method can exact the ultimate price (death, bubba!). Rave rats are very idealistic and figure they can tangle with this method if they are careful. And since Strike cannot undo the presence of this procedure in the literature or the determination of enthusiastic chemist to try this, no matter how much they are told not to, then Strike will at least lay down the proper way it is accomplished.

There is an incredible amount of energy in the carbon-nitro bond. TNT (trinitrotoluene) has three such bonds. Tetranitromethane has four! Starting to get the picture?



Tetranitromethane

Tetranitromethane was used as a double bond detector and for the detection of tyrosine in protein sequences. As you can guess, isosafrole's double bond is the point of attack. The problem is that there is not any accessible chemical company today that makes this compound anymore. So the rave rat is going to have to make it herself, and that's where the trouble begins. The best method for making tetranitromethane is in Organic Synthesis [77] using fuming nitric acid and acetic anhydride. All the glassware is cleaned with soap and hot water, rinsed thoroughly with distilled water, rinsed with acetone then rinsed once more with distilled water. The glassware is placed upside down on a sheet of foil in an oven and baked at 425°F for 1 hour. Baking destroys any remaining organics which can set off the tetranitromethane to explode. This glassware washing pro-



that all has distilled over when the last clear drops that come over will be water that will start to form a layer on top of the tetranitromethane. The product is washed with dilute NaOH, then water and dried through a very small amount of  $\text{Na}_2\text{SO}_4$  to give 16g pure tetranitromethane.

With tetranitromethane in hand, the chemist proceeds to convert isosafrole to  $\beta$ -nitropropene at an astonishing speed. 41g isosafrole, 300mL anhydrous acetone and 24g pyridine are well stirred in a flask and cooled to  $0^\circ\text{C}$  by means of an external ice bath (everything behind a blast shield of course). 54g of tetranitromethane is cooled to  $0^\circ\text{C}$  and then quickly poured into the reaction flask. The solution is allowed to react for exactly 2 minutes and then the reaction is immediately stopped by adding a mixture of 16.8g KOH in 300mL  $\text{dH}_2\text{O}$ . The temperature will have risen during the 2 minutes of reaction and the stoppage, so it is allowed to stir and chill back to around  $0^\circ\text{C}$ . As the solution chills,  $\beta$ -nitropropene crystals will form and can be removed by filtration. The filtrate can be extracted with DCM and the DCM removed by distillation to yield an additional crop of crystals. The yield is about 50g (90%). These crystals are clean enough to convert into MDA or MD-P2P.

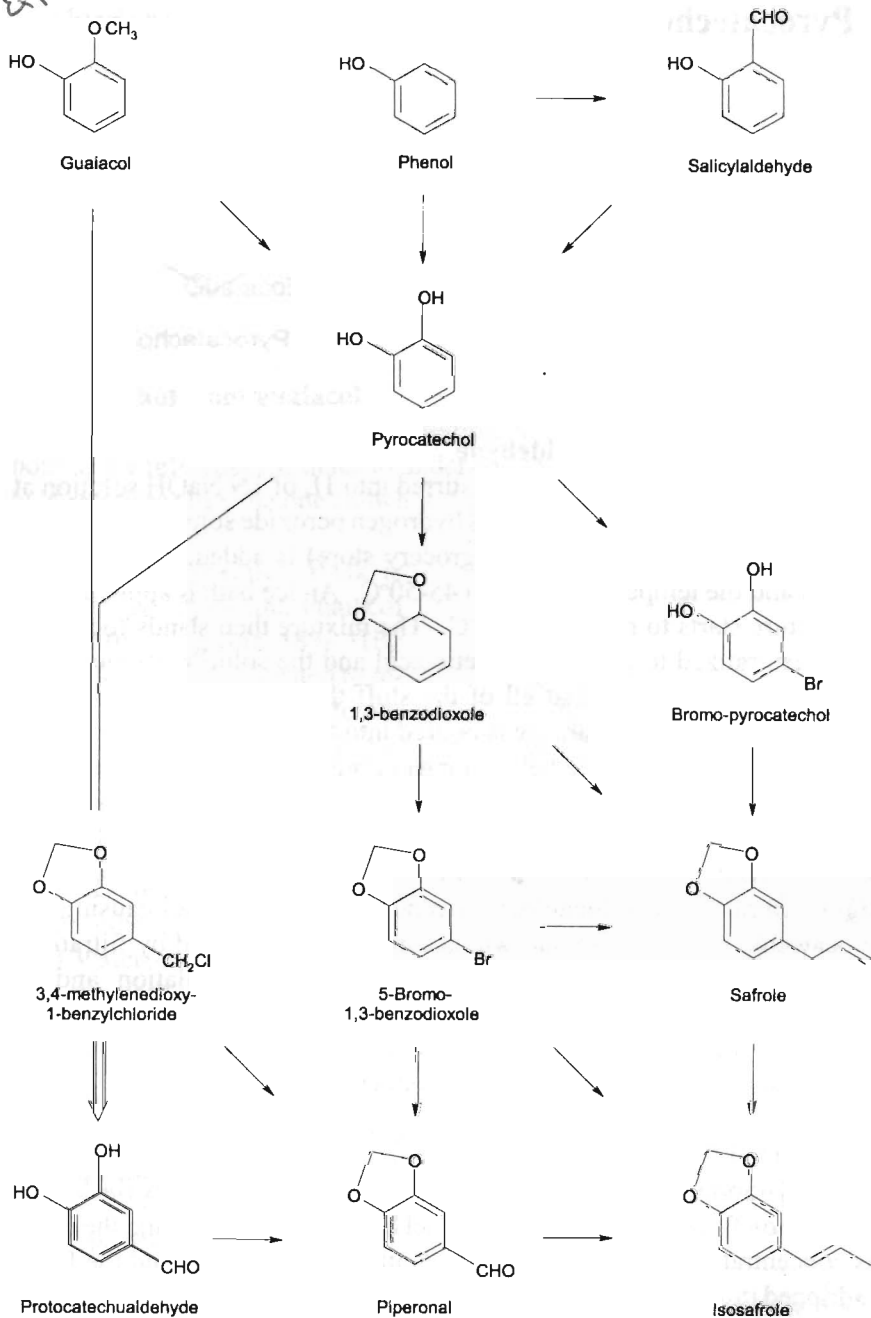
Now Strike is going to tell you a story. Once upon a time there was a beautiful kingdom of wealth and good will because God, in his infinite wisdom, had seen fit to bless the land with an abundance of bee pollen. It was the want of 49% of the citizenry to partake of this bee pollen because it made them happy. One day an army called The Majority invaded the kingdom and took seize of the bee pollen. You see, The Majority did not like bee pollen. In fact, the majority disliked bee pollen so much that not only would they not eat bee pollen themselves, they could not tolerate the idea of others eating bee pollen as well. There was much despair in the kingdom among those who liked bee pollen and many lamented their own fate. Some citizens became angry that those with might would impose their will on others. So those angry citizens took to tending bees in their cellars. It was of great expense to conduct such an undertaking and it forced many a citizen to forfeit a week's wage to obtain what they had once had for free. The Majority soon discovered that not only did many of the citizens have a distaste for the law against bee pollen, but that many citizens would break the law just to ingest bee pollen even though they were forbidden to do so. This affront angered The Majority so much that they decided to actually imprison citizens who ate bee pollen. The enormity of such a task soon became apparent as millions upon millions of citizen were sent to languish

this, Dr. Ritter, had to say back in 1952: "several attempts to obtain amides from...safrol (sic) were fruitless." [79]. What makes all these people think that this will work unless no one did their homework. This is another sore spot of Strike's and now Strike is going to bitch for one entire paragraph and will then rejoin you for the recipe at the beginning of the subsequent paragraph.

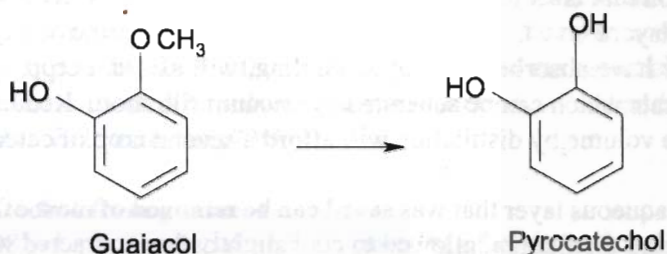
Concentrated sulfuric acid, which is called for in this experiment, will break the ether bonds of methylenedioxy ring structure on safrole. This allows the resultant phenols to dimerize and polymerize with other injured safrole molecules. If one included this with the natural protic destruction that  $\text{H}_2\text{SO}_4$  is going to cause on the rest of the molecule then this method becomes very untenable for X. Another contention Strike has is with the idea that cyanide procedures meant as a Ritter reaction nitrile source for the conversion of tertiary alcohols and t-butyl primary alcohols [80] will work on a straight-up allylbenzene as has been suggested. This, in fact, does not work well at all on both allylbenzene and safrole. Let say, for example, that there was a group of 'scientists' that, upon the suggestions from certain sources, invested in some expensive and elaborate equipment to safely perform the Ritter reaction using cyanide (a way that supposedly produces higher yields than acetonitrile). Let's suppose that both allylbenzene and safrole were tried with not one active compound being produced. Next, let's suppose that these scientists were so pissed off that they had every oil fraction from the beginning of the procedure to the very end analyzed by mass spectrometer and found that all one ends up with is crap, crap, crap, and some unreacted precursor. Maybe someone has a way to use these cyanide procedures that work. But as far as Strike is concerned, they are not worth the hassle and/or risk.

Hey, Strike is back. Anyway, the only people this procedure is going to help are those interested in speed, and the only applicable version is going to be the one using acetonitrile. It's pretty simple though, and the chemicals needed are very basic. 59g allylbenzene in 200mL acetonitrile is stirred in an ice bath to a temperature of  $10^\circ\text{C}$  then 270mL  $\text{H}_2\text{SO}_4$  is slowly dripped in so that the temperature remains at around  $10^\circ\text{C}$ . An alternative to this would be to mix the acetonitrile and  $\text{H}_2\text{SO}_4$  together and then drip the allylbenzene in. Either way, after addition is complete, the ice bath is removed to allow the temperature to rise. The temperature will rise slowly to around  $50^\circ\text{C}$ , then start to rapidly climb towards  $80^\circ\text{C}$ . Most methods give the impression that this solution is going to stop getting hotter at  $80^\circ\text{C}$ ,

# BUILD FROM SCRATCH



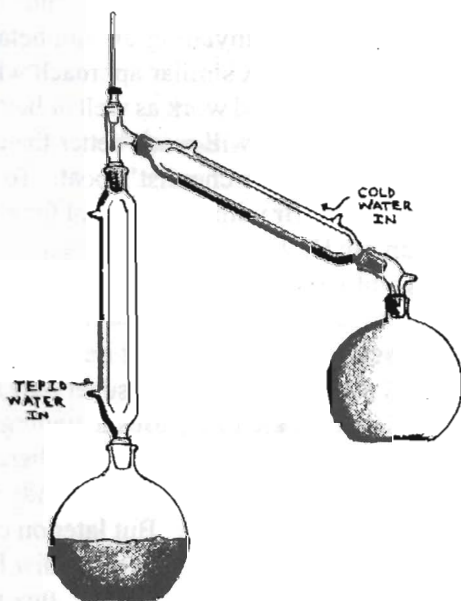




### Pyrocatechol from guaiacol

[81,83]--Before a chemist attempts this procedure she should read both of the referenced articles to understand why Strike has included a hybrid apparatus like the one shown in figure 14.

Into the reaction flask is added 912g crystalline guaiacol and 1500g regular 48% HBr which is then slowly heated to reflux. The tepid water condenser is there to allow the bromomethane that is formed to leave the reaction flask but is still 'cold' enough to keep the other reactants in the reaction flask. The noxious bromoethane condenses in the cold water condenser and drips into the chilled methanol in the collection flask. This will keep this bromoethane trapped so that the chemist will not die from breathing said gas. The reaction refluxes for 4 hours during which time the temperature that registers directly above the warm condenser should be about 95°C.



[fig 14]

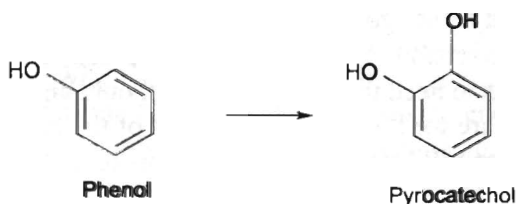
When the temperature starts to climb beyond 95-97°C then it is time to stop the reaction. Some water and a little guaiacol will be lost during the reaction but that is ok because guaiacol is so cheap that the chemist couldn't care less. The reaction flask contents should take on a slightly pink color.

good idea to dilute this solution with some 0.5M HCl and then stir or shake the flask so as to break up the crystalline mass. Next, some toluene or benzene is poured into the flask and heated so that the catechol dissolves into the hot solvent. The solvent layer is separated, cooled and processed as usual to yield catechol (70%).

### Pyrocatechol from guaiacol

[88]--1 part guaiacol and 2.5 parts  $\text{Me}_3\text{SiSnA}$  in 1,3-dimethyl-2-imidazoline heated at  $185^\circ\text{C}$  in a sealed pipe bomb gives 80-96% catechol.

[89,90]--guaiacol and cupric perchlorate ( $\text{Cu}(\text{ClO}_4)_2$ )-ascorbic acid (that's vitamin C, bubba!) are mixed in an appropriate solvent under oxygen atmosphere in a flask to give about 30% catechol.



### Pyrocatechol from phenol

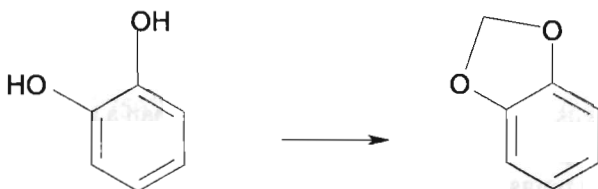
There are a lot of bad conversion recipes for phenol and a few so-so ones. This doesn't matter because phenol is about as cheap and common as dirt. This means that the chemist can experiment with it at her leisure.

[91]--5g phenol in  $\text{dH}_2\text{O}$  is stirred 5 hours at  $20^\circ\text{C}$  with some ferric sulfate ( $\text{Fe}_2(\text{SO}_4)_3$ ), an additional 7mLs  $\text{dH}_2\text{O}$ , 13mLs 6%  $\text{H}_2\text{O}_2$  and a 'pinch' of aluminum oxide ( $\text{Al}_2\text{O}_3$ ). Yield of catechol is 2.5g (50%).

[92]--Phenol can be oxidized with either performic, formic or acetic acids to catechol. For example: phenol, formic acid, concentrated  $\text{H}_2\text{O}_2$  and polyphosphoric acid are heated 2 hours at  $80^\circ\text{C}$  to give 53% catechol. Addition of phosphorus pentoxide ( $\text{P}_2\text{O}_5$ ) is said to increase the yield.

[93]--Phenol and 30%  $\text{H}_2\text{O}_2$  in molar ratios of 10:3 to 10:8 is heated at  $70^\circ\text{C}$  for 8-10 hours to give ~15% catechol. Addition of tert-butyl alcohol increases the yield.

## Methylenation



With catechol in hand there are many ways to proceed as one can see from the genealogy chart. Strike feels it's best just to dive right in and discuss the most pivotal point of all that makes X what it is: that little bridged ring structure stuck on the benzene core. When the two OH groups of catechol are bridged, the species that is borne can be named either methylenedioxy benzene or, as the Chemical Abstracts call it, 1,3-benzodioxole. Why '1,3-'? Well, the carbon that bridges the two oxygens is now counted as the #2 carbon. Later, when the chemist adds something to the 1,3-benzodioxole, all the numbers change again and the #2 carbon will no longer count. Isn't chemistry confusing? There is one very important thing that there should be no confusion about. That is that if one were to demethylate eugenol to get allylpyrocatechol, demethylate vanillin to protocatechualdehyde, or acquire any species that has those two adjacent OH groups then those molecules can be methylenated just like catechol with similar yields. One needs to remember to adjust for the weight differences of the different species one wants to methylenate.

The reaction itself works by the action of Na or K from NaOH or KOH which form what is called a catechoxide dianion with the two OHs of the catechol species. This makes the two ripe for an attack by a methylene halide which can be either DCM (methylene chloride, or dichloromethane), DBM (methylene bromide, or dibromomethane) or DIM (methylene iodide, or diiodomethane). DCM is cheap and works pretty well, but DBM and DIM work better yet are more expensive.

### Methylenation #1

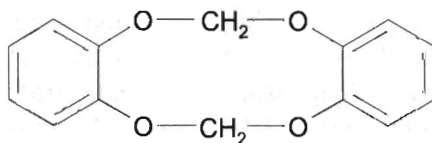
Methylenation started out in the first part of the century using a process pretty much like the following [98]. 55g pyrocatechol, 200mL dH<sub>2</sub>O, 40g KOH, 140g DCM and 125mL ethanol are heated in a sealed pipe bomb at 120°C for 24 hours. The solvent is then distilled off and the 1,3-

up or scale down the amount of reactants so that the total amount of all the ingredients consumes no less than 90 of the volume space of her particular pipe bomb. Too much head space with its atmospheric air will lower the yield. The bomb is heated in an oil bath or oven at 105-115°C for 18-24 hours and the contents are then distilled with the 1,3 benzodioxole coming over at about 170-175°C with no vacuum. Alternatively, the chemist can only distill off the methanol, wash with dilute NaOH solution and extract with ether, etc.

### Methylenation #3

Things start to look easier and the yields higher when the following method is employed [101]. This method uses a solvent called DMSO (dimethylsulfoxide). Maybe you've never heard of this solvent but Strike has. It is a common solvent used in all fields of science; and although Strike is not 100% sure, Strike believes that one can substitute DMF (dimethylformanilide) for DMSO.

110g catechol, 500mL DMSO, 100mL DCM and 83g NaOH are stirred in a flask with a condenser just like fig. 7a. The temperature is brought up to 120°C either by direct heat or by an oil bath. A violent reaction will start when the temperature is approached and will last for only 10 minutes. That's it! The solution is stirred for another 30 minutes and then allowed to cool. The 1,3-benzodioxole can be removed by methods similar to those of the previous two methylenation methods or one can do the superior method of separation employed by the scientists of this article. They found that by adding water (about 500mL) to the reaction mix and then distilling it with no vacuum, that the benzodioxole will distill over with the water at the same time as an azeotrope (an azeotrope is a term for when two things are stuck together when they distill over). The azeotrope will separate out in the collection flask to give a clear upper layer of water and a clear lower layer of oily benzodioxole. If one has made heavier oil species such as piperonal or safrole using this, then it is preferable to just straight up distill the stuff without the addition of water. The yield of 1,3-benzodioxole is 70%.

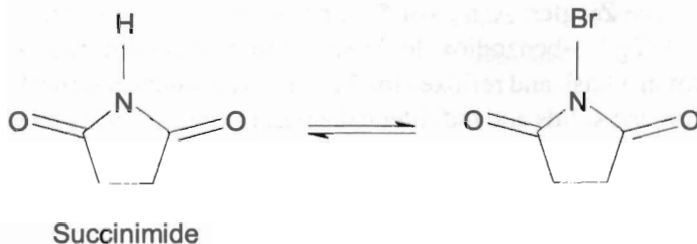




25.2g DCM is added and the solution stirred for 20 minutes. After 20 minutes about 500mL cold dH<sub>2</sub>O is added and the whole thing extracted with ether. The solvent layer is dried through Na<sub>2</sub>SO<sub>4</sub> and distilled to give 1,3-benzodioxole (yield=93%).

consider using acetic acid as the solvent instead of chloroform and drip liquid bromine into it as previously described [105-106] to give about 90% yield as well.

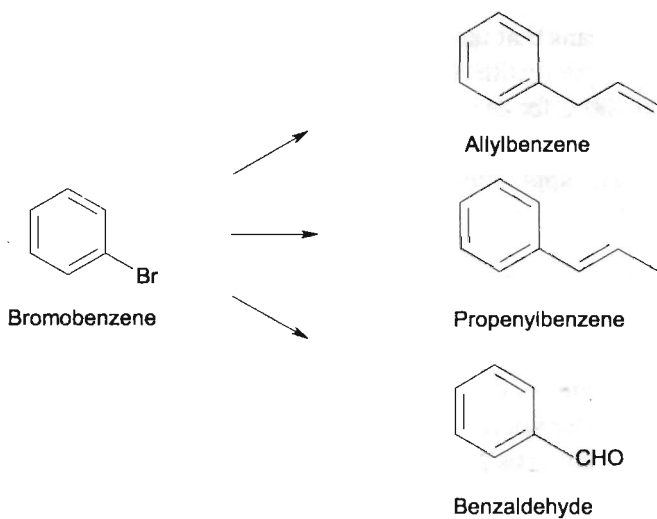
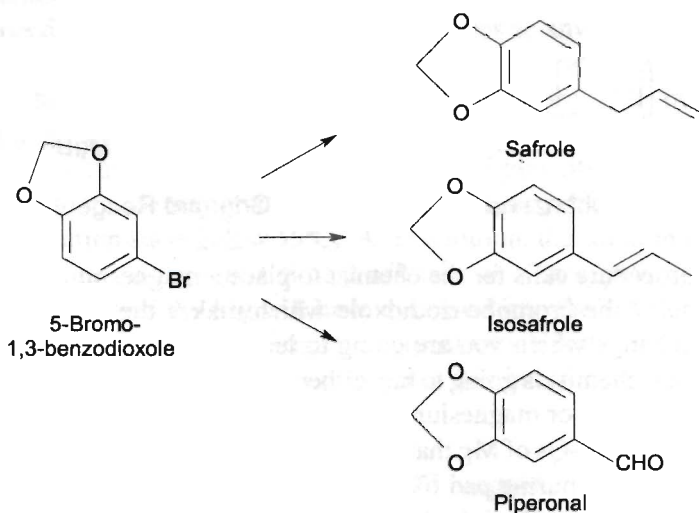
The next two bromination recipes use recyclable bromine donors that can be used over and over again. They are called dioxane and succinimide and are more common than you think. No, dioxane is not the same as the notorious dioxin but it is still pretty toxic.



These little beauties are like bromine quarterbacks in that they take the ball (Br) and hand it off to the receiver (1,3-benzodioxole). The great thing about these two species is that they are so bulky that the only place on the benzene ring that they can hand off their Br atom with any efficiency is at the least hindered #5 carbon which is the exact one wants the Br to be on. Once brominated, the Br acts as a final deterrent to the possibility of a second bromination. As you can surmise, multiple brominations can be a problem with some methods. After releasing their bromine, both dioxane and succinimide are reformed and can be separated for reuse.

## The Big Chapter

Now comes the mother of all chapters. Three different controlled ecstasy precursors from 1 compound: bromobenzodioxole. This is also the point that speed makers should begin to pay more attention. In the **chemicals** section of this book Strike has provided the recipe for making bromobenzene so that the speed chemist can make all of the analogous precursors.



stirplate because the chemist may need to throw some ice water in it during the reaction. Although not entirely necessary it is probably a good idea to squirt a little nitrogen into the head space of the three neck flask before the reaction begins. Another thing to consider before beginning is whether or not to place a catalyst into the reaction flask. What this means is that it is sometimes difficult to get a reaction going between the magnesium and the bromo compound and chemists often add a little insurance policy in the form of a tiny crystal of iodine or, as in ref 110, exactly 2 drops of dibromoethane into the reaction flask liquid. Like Strike said, it is not always done but it is best that the chemist does so anyway.

The reaction is started by dripping the bromo/THF mix from the separatory funnel into the stirred reaction flask. A vigorous reaction will begin to occur after a little addition. This will give off heat so the chemist adds ice to the ice tray and/or controls the dripping so that the temperature of the reaction stays below 55°C. After addition, the solution is stirred for another hour, during which time it will take on a dark, yellow-green color and just about all the Mg will have dissolved into the solution. That's it. The chemist now has her Grignard reagent which is the entire solution in the reaction flask. She needs to process this into the final product soon because the reagent won't keep forever.

### **Safrole or allylbenzene from Grignard reagent**

All the glassware from the making of the Grignard reagent remains exactly the same with the Grignard reagent still resting in the reaction flask. The only change is that the ice bath tray is removed. Into the separatory funnel is placed 60g of anhydrous allylbromide ( $\text{Br-CH}_2\text{-CH=CH}_2$ , see **chemicals** section for how to make) and this is then slowly dripped into the Grignard solution. Another vigorous reaction will start and the addition is regulated so that things do not get out of control. After addition the solution is refluxed for 3 hours, cooled and then hydrolyzed by pouring the reaction mix into 300mL ice cold saturated ammonium chloride solution in a PP container.

What the chemist will see is two layers: a solvent layer (THF or  $\text{Et}_2\text{O}$ ) and a water layer with a lot of suspended solids. The chemist can remove and discard the aqueous layer now or, preferably, the chemist can vacuum filter the entire two-layered solution to get rid of all the solids, then remove the water layer. Of course it is always a good idea to extract that water layer

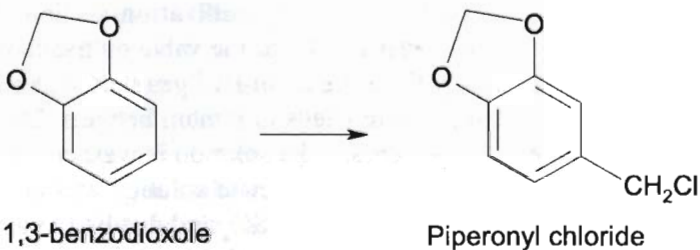


then isolated just the same to give an -hydroxy intermediate (please don't ask, but the yield is 81%).

What the chemist has is an alcohol intermediate which is not what she wants. If she were to flick off that OH group then a double bond will form in its place and isosafrole or propenylbenzene will be borne [19]. So what the evil chemist does is place 60g of the alcohol intermediate oil and 1g potassium bisulfate ( $\text{KHSO}_4$ ) into a really small flask, attach the flask to a distillation apparatus and start heating with vacuum. As the OH group is being kicked out it will form water, which the chemist will see distilling over. When no more water can be seen evolving then the reaction is finished. However, the chemist continues to heat to distill over all of the isosafrole which will smell just like licorice (yield=91% from the intermediate). If the chemist wanted to she could perform the same bisulfate procedure in a beaker or flask without the distillation setup and stop the reaction when a temperature of  $170^\circ\text{C}$  has been reached [5 p698]. The oil is still going to have to be distilled to purify it though.

## Thank You Sir May I Have Another

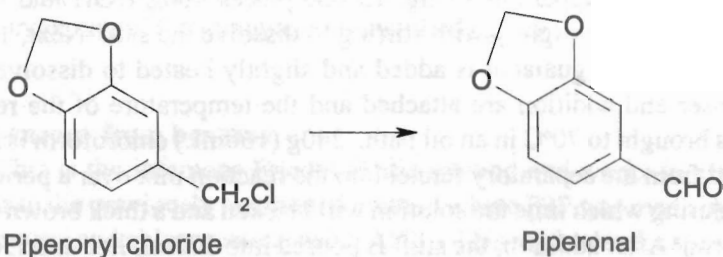
Why sure you can. Here are all the anothers to make that genealogy map of total precursor synthesis complete.



### Chloromethylation

This procedure is called chloromethylation and will not only turn 1,3-benzodioxole into a methyl chloride but will work equally well in converting plain old benzene into benzyl chloride. Both are important stepping stones towards the production of X and meth. For example, benzyl chloride is a schedule I controlled substance because it will beget benzaldehyde and phenylacetone (a precursor for phenylacetic acid).

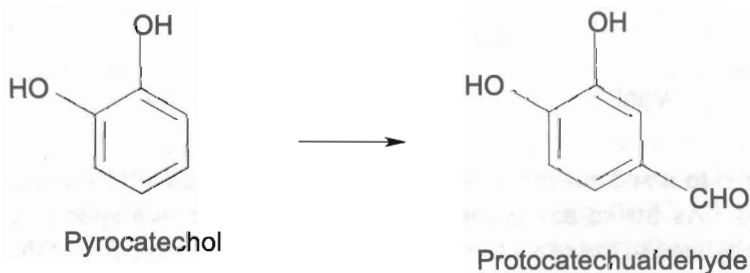
ethylenetetramine, is a weird looking chemical that is easily made from formaldehyde but is better off being purchased.



In a flask with stirring is added 158g piperonyl chloride or 126g benzyl chloride, 140g hexamine and either 500mL 50% aqueous acetic acid or 500mL 60% aqueous ethanol. The solution is refluxed for 2 hours then 200mL 3N HCl is added and refluxing is continued for 15 minutes more. When cool, the solution is extracted with ether, the ether washed 3 times with water, dried through  $\text{Na}_2\text{SO}_4$  and vacuum distilled to afford piperonal or benzaldehyde (yield=70%). The two products are quite fragrant which will give the chemist an idea of the success of the procedure. Did you know that a lot of methylamine is produced as a side product of this reaction? How it can be salvaged Strike has no idea.

### Protocatechualdehyde from catechol

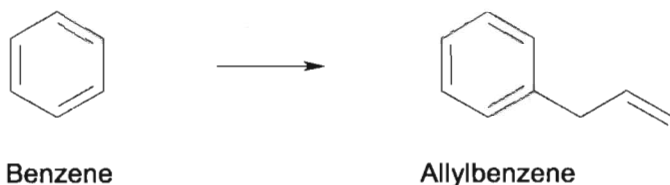
This is a nifty little way to turn catechol or guaiacol into protocatechualdehyde or vanillin using what is called the Riemer-Tiemann reaction [3 p824, 116]. It is a really ancient reaction and only works on benzene molecules that have an OH group. One needs to use KOH instead of NaOH because it is better at promoting para substitutions (don't ask). And if one is going to make vanillin from guaiacol then there needs to be a little ethanol in the reaction as well.



It doesn't take a rocket scientist to see that all the two resulting catechol species need to become piperonal or safrole is to bridge those double hydroxy groups by methylenation. In fact, these two will work marvelously under any of the methylenation methods given in this extremely fine book.

### Allylbenzene from benzene

This is the infamous Friedel-Crafts method and works in a manner similar to the previously mentioned method where P2P was made by merging benzene and chloroacetone using  $\text{AlCl}_3$ . This method is for speed makers only and is not recommended for conversion of 1,3-benzodioxole. However, this should work in a limited way on catechol. The conversion factor is very low but that isn't a major concern of speed chemists because cheap old benzene is the precursor and all of that benzene that isn't converted can be run back through this simple little process over and over again. Before she knows it, the chemist will have amassed an enormous amount of allylbenzene [117, 118].

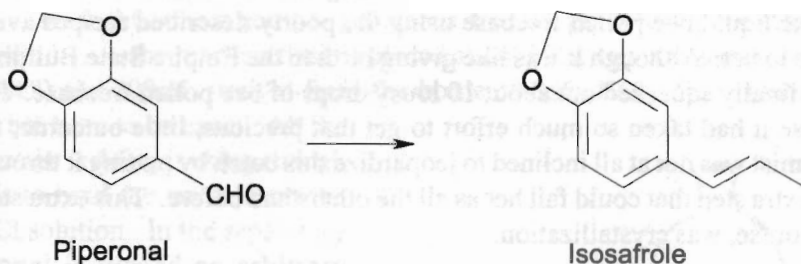


Aside of benzene the chemist has a choice in which allyl she can use. Allyl alcohol, allyl bromide or allyl chloride can be used with equal success but allyl alcohol is a nice bonus because it is easier to make than the other two. All three of these are really cheap to purchase but Strike is going to tell how all three are made in the **chemicals** section.

Everything needs to be anhydrous and the procedure begins by chilling 500g benzene, and 80g allyl alcohol to 0°C in a single-neck flask. 90g of powdered, anhydrous  $\text{AlCl}_3$  is added which will cause a violent reaction and heat. A condenser is immediately attached with a tube leading to a water trap and the solution is allowed to come back down to room temperature. The reaction stirs for 6 more hours at room temperature, poured into ice cold dilute HCl solution and the benzene layer separated. When the benzene layer is distilled the first things to come over are perfectly reusable



This method is merely an application of the Grignard reaction but is a lot less troublesome because it uses really common chemicals. This method



can be done as it was done in the reference where a phenylbutene was made using a bromopropane (bromopropane and bromoethane are cheap to purchase or can be made from propanol or ethanol). These phenylbutenes will produce a perfectly respectable amphetamine that make an excellent substitute for X, but for confusion's sake Strike is going to describe the isosafrole synthesis as well.

The apparatus to use is the same as fig.15. 52g of 1-bromopropane for the phenylbutene or 46g bromoethane for isosafrole or propenylbenzene is placed in the separatory funnel. In the flask is stirring a solution of 14g Mg turnings and 50mL anhydrous ether and the bromine compound is dripped into the flask over a 20 minute period of time then the solution stirred for an extra 10 minutes. Next, a solution of 50g piperonal (or 35g benzaldehyde) and 200mL anhydrous ether is placed in the separatory funnel and added drop wise to the Grignard reagent over 30 minutes time. The reaction mix is then refluxed for 8 hours, hydrolyzed by the addition of 75 mL ice cold saturated ammonium chloride solution and vacuum filtered to remove the crud. The ethereal filtrate is washed with ice cold 1.5N HCl solution, dried through  $\text{Na}_2\text{SO}_4$  and the ether removed by distillation to afford a residue of 62g of crude alcohol intermediate (almost 96% yield!).

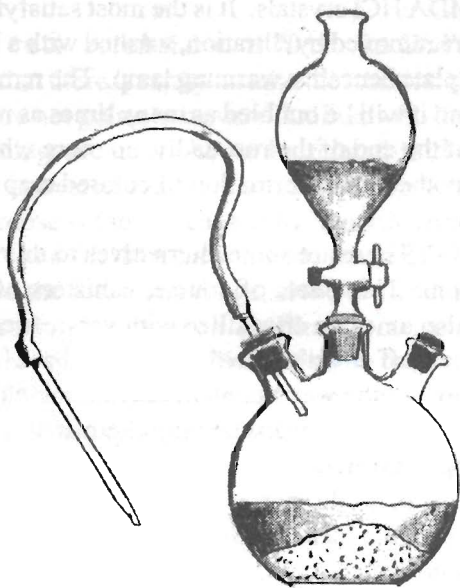
The alcohol intermediate happens to be the exact kind of intermediate that was produced by the Grignard reagent reaction with propanal to produce isosafrole back-a-ways in **the big chapter**. So what the chemist does is apply the 1g of  $\text{KHSO}_4$  to that crude alcohol intermediate and process it just as was done before to give isosafrole or propenylbenzene or 3,4-methylenedioxyphenyl-1-butene or phenylbutene (yield=91%! ). This is a great little procedure.



to as 'whatever-drugHCl'. The drug companies crystallize their freebases with HCl and so will the underground chemist.

To do this, one is going to generate a dry HCl gas by using the setup in figure 17. In the reaction flask is placed about 100g non-iodized table salt (NaCl) and 200mL straight-from-the-bottle 30-35% HCl. These amounts do not have to be exact. All the chemist is doing is using enough salt to bind the water from the HCl solution. In the separatory funnel is placed an arbitrary amount of concentrated (96-98%)  $\text{H}_2\text{SO}_4$  (let's say 100mLs). The HCl/salt mix doesn't need to be stirred but a little swirling at the beginning, to mix the salt and acid, and occasionally during the addition is preferable.

In a plastic container the chemist dissolves her golden yellow freebase oil into some anhydrous ether or ethanol (ether is better). The chemist then starts a steady dripping of the sulfuric acid into the HCl/salt and white, puffy HCl gas will start to exit the glass rod or pipette which is at the end of the hose. That tip is then plunged into the ether/freebase solution to bubble the gas through the ether.



[fig 17]

There's a few things to note about what happens next. If the freebase that the chemist has is not 100% pure (which it usually isn't) then there is going to be a little pre-crystallization crap that will crystallize first. This stuff is usually orange or pink and has a crumbly, nugget-like appearance. If this stuff is going to come out it will usually occur after about 30 seconds or so of steady bubbling. When the chemist sees this she stops the bubbling and vacuum filters this stuff from the solution. Every time the chemist vacuum filters during crystallization she must always wash the filter cake with a little extra ether. Before she discards the filter with the crap in it she washes it with a little extra ether because there will always be some valu-

Usually, the title of a medical case reads something like "A reported case of death attributed to the drug ecstasy". But if one reads the case report it is always about how the subject had been mainlining speed for a week or had seventeen existing mental and physical abnormalities prior to taking the X. Such people are ripe for an adverse reaction. Attributing such deaths to X is about the only way scientists or doctors can further whatever agenda they are being paid to further.

It is almost impossible to OD on X. A lethal dose is 70 hits for God's sake! Because of this, and the fact that there is rarely an adverse reaction to a normal dose, hospital personnel are not going to be very familiar with the proper treatment. So, if such a thing occurs it should be related to the doctor what drug it is and how it is treated [129]. The most immediate concern for any amphetamine overdose is fatality caused by hyperthermia (body gets too hot, bubba!). MDA and MDMA have a wide range of effects on the human body, but any of the following drugs, alone or in combination, will help: 5-HT uptake inhibitors such as Fluoxetine and Citalopram, 5-HT antagonists such as Ritanserin and Methiothepin, dopamine antagonists such as Haloperidol and -butyrolactone, dopamine neurotoxic lesion compounds such as 6-hydroxydopamine, drugs enhancing GABA function such as Chlormethiazole and Pentobarbitone, and excitatory amino acid antagonists such as Dizocilpine and Dextromethorpan. Let Strike tell you this: if you had a buzz you would not have it very long if you were given any one of these drugs.

The way the chemist knows that she has methylamine and not ammonium chloride is that she compares the look of the two types of crystals. Ammonium chloride crystals that come from this reaction are white, tiny and fuzzy. The methylamine hydrochloride crystals are longer, more crystalline in nature and are a lot more sparkly. The chemist leaves the methylamine crystals in the Buchner funnel of the vacuum filtration apparatus and returns the filtrate to the distillation set up so it can be reduced one last time to afford a second crop. The combined methylamine hydrochloride filter cake is washed with a little chloroform, scraped into a beaker of hot ethanol and chilled. The methylamine hydrochloride that recrystallizes in the cold ethanol is vacuum filtered to afford clean, happy product (yield=50%)

### **Lithium aluminum hydride (LAH, $\text{LiAlH}_4$ )**

[123]--Everything here must be performed in the hood and everything must be as absolutely water-free as possible. The apparatus to use is the one in fig. 15. In the reaction flask is placed 30mL  $\text{Et}_2\text{O}$  (ether) and 23.5g lithium hydride which is stirred for a few minutes. In the separatory funnel is placed a mixture of 71.2g anhydrous aluminum chloride ( $\text{AlCl}_3$ ) and 300mL ether which is dripped in at such a rate that the reaction produces enough generated heat to cause a sustained reflux but not so much that the reaction gets out of control. When the reaction has visibly ceased, the chemist filters the white particulates from the solution by vacuum filtration (the  $\text{LiAlH}_4$  is in the filtrate solution). The ethereal filtrate is distilled with no vacuum until the residue that remains is syrupy then the rest of the ether is removed under vacuum to give a residue in the flask that is  $\text{LiAlH}_4$  (86%).

There are a few points to remember about making this catalyst. When scientists were first synthesizing  $\text{LiAlH}_4$  they found that it was necessary to have a tiny piece of  $\text{LiAlH}_4$  already in the reaction vessel to facilitate the start of the reaction between the  $\text{LiH}$  and  $\text{AlCl}_3$ . If the  $\text{LiAlH}_4$  was not present then the  $\text{AlCl}_3$  would keep being added and added until the solution would suddenly burst into an uncontrolled reaction. It was determined later that what caused this 'induction' period of no activity was the time it was taking for the protective coating of lithium hydroxide to dissolve away from the lithium hydride. Apparently all commercial lithium hydride has such a coating. Some people found that a drop of iodine would negate such a phenomenon but it was finally shown that if absolutely, 100% dry ether



chased as a commercially made product) is placed in a pipe bomb. Pressure is applied and the bomb is placed in a 120-130° oil bath for 2 hours. The ether is removed under vacuum and the  $\text{NaBH}_3$  is isolated by recrystallization from water. To do this the chemist adds water to the residue which causes the  $\text{NaBH}_3$  to crystallize out as a dihydrate precipitate. This white precipitate is separated as a filter cake, washed with a little water and the filter cake is vacuum distilled to remove the dihydrate water molecules that are attached the catalyst. This dry  $\text{NaBH}_3$  is now suitable for use. Although Strike is again not sure, Strike thinks it might be possible to attempt this in a plain old sealed pipe bomb without the pressure addition.

### **Sodium cyanoborohydride ( $\text{NaBH}_3\text{CN}$ )**

[125]--This catalyst has not been given a fair shake in underground literature and, as of this book's printing, is still relatively safe to purchase. A prudent chemist will most likely stock up on this chemical because the eventuality of more intense scrutiny is inevitable. The best way to make this product is to start with  $\text{NaBH}_3$  which is much more safe to buy. However, the way to go about making this catalyst is not very safe unless strict adherence to safety is used.

The 'cyano' part of cyanoborohydride is going to come from cyanide of course, and cyanide is lethal. Cyanide has no odor and will kill you instantly if a single whiff of it is inhaled. Everything must be done in a hood and study or investigation of the literature beyond what is published here is strongly urged. To acquire a stabilized source of cyanide one is going to need to introduce hydrogen cyanide (HCN) into tetrahydrofuran (THF) solvent. Ideally one would want to use a cannister of cyanide gas and bubble it into the THF but Strike seriously doubts such a thing will be sold to a street punk. This is because such an item, in the wrong hands, could be a terrible terrorist weapon. The best way a home chemist could 'safely' produce HCN is by generating it herself.

To make a cyanide/THF solution one is going to have to create HCN from sodium or potassium cyanide. To do this one is going to need to use the apparatus seen in fig. 14. There are going to be some minor changes though. The reaction flask is not going to be a simple single-neck flask but, instead, is going to be a single-neck with a sidearm inlet tube or a three neck flask with one of the necks stoppered and the other one plugged with a rubber stopper that has a wide glass tube extending all the way from the



temporarily stop, which is normal. The pull of the vacuum will get things going again. After addition the solution is brought to a boil and kept there for 1 hour. The chemist can now remove the receiving flask, weigh it and hope that it has gained approximately 60g in weight. That gain in weight will be due to the absorption of HCN.

With the HCN solution in hand, the rest of the procedure goes pretty quickly. 80g  $\text{NaBH}_3$  in 1L THF is stirred at 25°C and then the HCN/THF solution is gradually added. Bubbling caused by the release of hydrogen will occur (no smoking!) as the solution stirs for 1 hour at 25°C. The solution is then heated at reflux until no more hydrogen can be seen evolving. The solution is then vacuum filtered and the filtrate removed of THF by vacuum distillation to give  $\text{NaBH}_3\text{CN}$  (91%). Whew! All catalysts, including this one, must be stored immediately so that they have no prolonged exposure to air and moisture. This is especially true for  $\text{NaBH}_3\text{CN}$ .

### Sodium amalgam

[4 p194]--This is done in the hood because it has the potential to generate poisonous vaporized mercury. In a small flask is placed 15.2g of pure sodium metal with no stirbar. Sodium metal is explosive when put in contact with water. The sodium is immediately covered with about 100ml of toluene and slowly heated on the hotplate. Near a temperature of around 50°C the metal will melt in the hot toluene and at this point 750g of mercury are added drop by drop. The first few drops will cause violent bubbling of the toluene but this will diminish as the addition continues. When addition is complete, the chemist decants most of the toluene leaving just enough to cover the molten catalyst so that it will not degrade by exposure to the air. Now, while still hot, the toluene/amalgam mix is poured into the container the chemist wishes to store it in, the rest of the toluene is decanted and the air space flushed with nitrogen before sealing the container. The amalgam the chemist made is one of 2% strength.

### Allyl alcohol

[4 p459, 126 p42]--This chemical is not only useful in Friedel-Crafts reactions but is the major stepping stone for making allyl bromide which has wide uses. The set up to use is a simple distillation apparatus (no vacuum, bubbal!) with a tube leading away from the vacuum adapter to a NaOH solution trap. 400g glycerol and 175g 88% formic acid are placed in the reaction flask and rapidly heated so that it reaches 195°C in about 30-45 minutes during which time  $\text{CO}_2$  and a little distillate will evolve. At this

## Bromobenzene

[4 p535]--A flask is placed in an ice bath and in it is stirred 50g benzene and 0.5mL pyridine (slightly watched chemical). A condenser is attached and a drying tube made from a vacuum adaptor is prepared so that it has a hose extending to a glass of water (this will allow for the collection of HBr gas that will form during the reaction). The drying tube with its hose is not yet attached to the condenser. 125g (40mL) of liquid bromine is poured down into the reaction flask through the condenser and the drying tube is immediately attached. A vigorous reaction will occur and when it has died down the reaction is allowed to warm up to 25-30°C by removal of the ice bath and stir there for 1 hour. After 1 hour the solution is brought up to 65-70°C and kept there for 45 minutes or until no more red bromine vapors can be seen. Remember, all of that HBr vapor that bubbled into the glass of water can be salvaged as perfectly usable 48% HBr solution by distilling that water and collecting what comes over at 126°C.

The reaction solution is washed once with water, three times with 5% NaOH and once more with water. The benzene layer is dried through  $\text{Na}_2\text{SO}_4$  and distilled with no vacuum collecting the fraction between 150-170°C. This fraction is then redistilled and the fraction coming over at 154-157°C is the pure bromobenzene.

## Fuming nitric acid

This stuff is way too expensive to buy especially since it can be made so easily. 500mL regular nitric acid ( $\text{HNO}_3$ ) and 500mL concentrated  $\text{H}_2\text{SO}_4$  are mixed together in a flask and distilled with no vacuum. A reddish haze will appear over the reaction liquid which will distill over to give an orange-red fuming nitric acid distillate. This stuff needs to be stored in the dark.

## Nitroethane

[127, 128]--There just isn't a lot out there on the synthesis of this chemical and Strike is only going to quote from the two Chemical Abstract articles. One suggestion is to treat 1.5 moles of  $\text{Na}_2\text{CO}_3$  with 1 mole of sodium ethylsulfite and 0.0645 moles of  $\text{K}_2\text{CO}_3$  at 125-130°C. Another route would be to use silver nitrate and ethyl iodide [7 p119]. This type of reaction has been used to nitrate other paraffins and would probably work.

## Sentencing Guidelines for Precursors

Schedule I Chemicals	Amount (g)	Mandatory Sentence (months)
Anthranilic Acid	0-3600	10-16
Benzaldehyde	0-107	10-16
Benzyl Cyanide	0-120	10-16
Ephedrine	0-120	10-16
Ergonovine	0-1.2	10-16
Ergotomine	0-2.4	10-16
Ethylamine	0-120	10-16
Hydroiodic Acid	0-264	10-16
Isosafrole	0-1920	10-16
Methylamine	0-24	10-16
N-Acetylanthranilic acid	0-4800	10-16
N-Methylephedrine	0-3000	10-16
N-Methylpseudoephedrine	0-3000	10-16
Nitroethane	0-75	10-16
Norpseudoephedrine	0-1200	10-16
Phenylacetic Acid	0-120	10-16
Phenylpropanolamine	0-1200	10-16
Piperidine	0-60	10-16
Piperonal	0-1920	10-16
Propionic Anhydride	0-9.6	10-16
Pseudoephedrine	0-120	10-16
Safrole	0-1920	10-16
MD-P2P	0-2400	10-16
<b>Schedule II chemicals</b>		
Acetic Anhydride	0-66	10-16
Acetone	0-7050	10-16
Benzyl Chloride	0-120	10-16
Ethyl Ether	0-6450	10-16
Methyl Ethyl Ketone	0-7200	10-16
Potassium Permanganate	0-60	10-16
Toluene	0-7800	10-16

**Table 2**



## EPILOGUE

The war on drugs is all fine and dandy were there not so many casualties. No, Strike is not talking about the singular college student who goes on a one time coke binge and falls off a roof or the stoned teenager who mistakenly eats 90 tabs of acid and becomes a vegetable. These, in fact, are the exceptions that drive parents into frenzies and are the nuclei of the sound bites that grandstanding politicians use to pass knee-jerk laws without the slightest concern towards relevance or appropriateness. All this hysteria would be laughable were it not for the grave consequences these laws impose on the majority of the citizens in this country.

Contrary to what anyone thinks, drug use is not a crime of violence. It is not even a crime. Yet literally millions of your fellow citizens are still being locked up in prisons for ungodly stretches of time. These inhumane and degrading sentences are abhorrent by all civilized standards and permanently wreck the lives of all involved. And for what? Using a drug. It is a disgrace and is arguably criminal in its concept. Yet, it is an instrument that the hate groups of our world have used for a millennia to 'sanitize' those that do not conform to their ways of thinking.

And what do these millions of 'criminals' do after their penal 'rehabilitation'? They are faced with the last unchecked bastion of discrimination, which is that employers do not hire felons. Period. We are producing an entire subculture of 'criminals' that have no choice but to live by the code of the street for the rest of their lives. The protection these laws are intended to afford to keep the idiots of our society safe from themselves or to supplement the lack of parenting by others is in no way worth the devastation it is causing the people of our nation.

Since the drug war is so furious in its attempt to conquer, so will Strike be in Strike's attempt to stop it. If you think that one voice cannot make a difference then you had better think again. And if you do not like what this book is about then you'd better pray for some sanity to return to our government because Strike still has **hundreds** more recipes that can crush this obscene juggernaut into dust!



- [33] Tsuji, J., et al., "Organic Synthesis Collective Vol VIII", p137
- [34] Clement, W.H., et al., *J. Org. Chem.*, 29, p241 (1964)
- [35] Dal Cason, T.A., et al., *J. Forensic Sci.*, 29, p1187 (1984)
- [36] Elks, J., et al., *J. Chem Soc.*, p15 (1943)
- [37] Lieber, E., et al., *J. Org. Chem.*, 22, p238 (1956)
- [38] Smith, A.S., et al., *J. Am. Chem. Soc.*, 73, p2435 (1951)
- [39] Boyer, J.H., et al., *J. Am. Chem. Soc.*, 77, p951 (1955)
- [40] Levene, P.A., *J. Biol. Chem.*, 115, p415 (1936)
- [41] Levene, P.A., et al., *J. Biol. Chem.*, 120, p759 (1937)
- [42] Levene, P.A., et al., *J. Biol. Chem.*, 140, p259 (1941)
- [43] Reeves, W.P., et al., *Synthesis*, p823 (1976)
- [44] Prakash, G.K.S., et al., *J. Org. Chem.*, 51, p3215 (1986)
- [45] Boyer, J.H., *J. Am. Chem. Soc.*, 73, p5865 (1951)
- [46] Maiti, S.N., et al., *Synth. Comm.*, p1201 (1988)
- [47] Maiti, S.N., et al., *Tetrahedron Lett.*, 27, p1423 (1986)
- [48] Stanovnik, B., et al., *Synthesis*, p419 (1977)
- [49] Bayley, H., et al., *Tetrahedron Lett.*, p3633 (1978)
- [50] Vaultier, M., et al., *Tetrahedron Lett.*, 24, p763 (1983)
- [51] Rolla, F., *J. Org. Chem.*, 47, p4327 (1982)
- [52] Becher, J., et al., *Synthesis*, p530 (1989)
- [53] Malik, A.A., et al., *Synthesis*, p450 (1989)
- [54] Shulgin, A.T., et al., *J. Med. Chem.*, 18, p1201 (1975)
- [55] Rich, P., et al., *J. Med. Chem.*, 17, p1100 (1974)
- [56] Standridge, R. T., et al., *J. Med. Chem.*, 19, p1400 (1976)
- [57] Nichols, D.E., et al., *J. Med. Chem.*, 22, p1264 (1979)
- [58] Shulgin, A.T., *J. Med. Chem.*, 11, p186 (1968)
- [59] CA, 52, 18271 (1958)
- [60] Ho, B.T., et al., *J. Med. Chem.*, 13, p134 (1970)
- [61] Coutts, R.T., et al., *Can. J. Chem.*, 51, p1402 (1973)
- [62] Mourad, M.S., et al., *Synth. Comm.*, 14, 1099 (1984)
- [63] Woodruff, E.H., et al., *J. Am. Chem. Soc.*, 62, p922 (1940)
- [64] Groot-Wassink, B.H., et al., *J. Chem. Edu.*, 51, p671 (1974)
- [65] Noggle, T.F., et al., *J. Assoc. Anal. Chem.*, 69, p681 (1986)
- [66] Hey, D.H., *J. Chem. Soc.*, p18 (1930)
- [67] CA, 37, 621 (1943)
- [68] Gribble, G.W., et al., *Synthesis*, 12, p856 (1977)
- [69] King, J.A., et al., *J. Am. Chem. Soc.*, 73, p4911 (1951)
- [70] Cowan, D.M., et al., *J. Chem. Soc.*, p171 (1940)
- [71] CA, 48, 8261, (1954)
- [72] Mason, J.P., et al., *J. Am. Chem. Soc.*, 62, p1622 (1940)

- [113] Backvall, J.E., et al., *J. Org. Chem.*, 56, p2988 (1991)
- [114] CA, 111, 140241q (1989)
- [115] CA, 33, 3777 (1939)
- [116] Tiemann, F., et al., *Ber*, 14, p2015 (1881)
- [117] Huston, R.C., et al., *J. Am. Chem. Soc.*, 48, p1955 (1926)
- [118] Patrick, T.M., et al., *J. Am. Chem. Soc.*, 68, p1009 (1946)
- [119] CA, 56, 14139 (1962)
- [120] CA, 56, 4677 (1962)
- [121] Jones, H.I., et al., *J. Am. Chem. Soc.*, 40, p1411 (1918)
- [122] Marvel, C.S., et al., "Organic Synthesis Collective Vol I", p347
- [123] Finholt, A.E., et al., *J. Am. Chem. Soc.*, 69, p1199 (1947)
- [124] CA, 46, 6025 (1952)
- [125] Lane, C.F., *Synthesis*, p135 (1975)
- [126] Kamm, O., et al., "Organic Synthesis Collective Vol I", p25-43
- [127] CA, 49, 836 (1955)
- [128] CA, 38, 2006 (1944)
- [129] Green, R., et al., *Pharmacology*, 119, p247 (1995)

Strike also suggests, in the strongest possible manner, that one purchases the "Merck Index" down at the local college bookstore. This reference book is a wellspring of information on almost every biological and chemical substance known to man.

## REMEMBER

This book is an illustration of the chemical methods by which underground chemists make amphetamines. It is illegal to use the information in this book to make drugs. Strike insists that you adhere to that. However, it is incumbent on all of us to change these laws democratically in order to protect ourselves, our neighbors and our children. Yes, even our children. Because they are, like all of us, human. And it is more likely than not that they will use a drug in their lifetime. A hit of X taken at a party is not going to harm a person. A joint will not ruin some one's life. But the laws in place will devastate that young person's life forever. Think about it!